REAGENTS
DUKSAN

Reagent & Chemicals 2015 - 2016

Total Solution for
Preparative Chromatography

YMC
System for production/purification, HPLC column, Packing material, Flow reaction - p.34

REAGENTS
DUKSAN
PREP Solvent, Distillation tower, Sovent Recycling - p.44

REAGENTS
DUKSAN

With strict Quality management

[Business of DUKSAN]

Analytical Reagents
Raw Materials for Pharmaceutical
Food Additives
Electronic Materials
Organic chemicals for LCD & Solar cell process

Dear Customers!

As a major label of solvent/reagent producing companies in South Korea DUKSAN is working hard towards achieving 'High quality, High satisfaction' by enforcing **Strict Quality Management** and new product development.

Since the company's establishment in 1970, improvement in manufacturing technology and new technology development have been sought after by continuous investment and development.

Besides over 2,000 kinds of analytical reagents, DUKSAN offers a comprehensive product range for High purity solvents, Electronic materials, Raw materials for phamaceuticals, Food additives and Chemicals for LCD & Solar cell process.

We wish you success with our products and if you have any questions on our products please feel free contact us.

Contents

General Information
- Introduction 002
- Product overview classified by areas 004
- Using Catalog information 028

Preparative Chromatography
- YMC 034
- DUKSAN 044

Reagents & Chemicals
- Alphabetical product list, specification & its prices 048

Tables and Data
- Synonyms (Korean) 313
- Typical Solvent Physical properties 321
- Solvent Chart & Tables 325

Index
- Alphabetical list Numbers 329
- CAS Registry Numbers 345

Partners
- HIGH-PURITY STANDARDS 365
- HYUNDAI MICORO 371
- KOREA SCIENCE 378
- LOBA Chemie 382
- Vision Scientific 389

Introduction

Greetings / Certification / History of DUKSAN

Greetings

덕산약품공업(주)는 대한민국 대표 시약업체로서 세계적인 시약업체들과 경쟁하며 국내 시약업계를 선도하는 업체로 상장해 왔습니다.

1970년 창업한 이래 덕산약품공업(주)는 일반 기초분석 시약 등 순수 화학약품 제조회사로 시작하여, 지속적인 투자와 개발로 품질향상과 생산기술 개선뿐만 아니라 신기술 개발을 위하여 끊임없는 노력을 한 결실로, 현재는 일반 화학시약, 원료의약품, 전자공업시약, 식품첨가물, 특수용도 등 각종 시약 2,000 여종을 생산하고 있습니다.

90년대에는 HPLC 및 잔류농약분석용 시약을 개발하여 전량 수입품에 의존하던 제품을 국산으로 대체함과 동시에 더 나아가 해외시장을 개척하여 수출을 시작하였으며 현재 지속적인 수출물량 증가로 그 결실을 맺고 있습니다.
또한 2003년 LCD프로세스용 스트리퍼 재생 시설의 가동 및 2008년 Solar cell 공정용 화학약품 생산을 개시하였습니다.

앞으로 끊임없는 혁신을 통해 고객 제일주의로 고객을 먼저 생각하고 앞서 나가는 경영 방침으로 세계적인 기업 덕산약품공업(주)가 되기위해 노력하겠습니다.

덕산약품공업(주) 임직원 일동

Certification

Registered
ISO 9001:2008 / ISO 14001:2004

BGMP

INNOBIZ

ISO 9001/ISO 14001 Qualified Company

BGMP Qualified Company

Innovation-Business [INNO-BIZ]

History of DUKSAN

1970. 05.	Duksan started as **"SAMSUNG CHEMICALS INDUSTRIAL,"**
1978. 10.	Moved its manufacturing plant to Youngin city, Kyungkido area. Changed its name to **"DUKSAN PHARMACEUTICAL INDUSTRIAL CO."** Began producing high purity chemicals and opened a sales office in Seoul.
1980. 06.	Manufacturing Permission for Drugs was obtained. Obtained Registration of Poisonous Substance Production.
1986. 01.	Incorporated & renamed company name to **"DUKSAN PURE CHEMICALS CO."** Obtained a trading license for both importing and exporting
1989. 09.	Built 1st Ansan manufacturing plant
1996. 08.	Developed the HPLC & Pesticide residue Grade solvents.
1997. 02.	Selected PROMISING SMALL & MEDIUM-SIZED ENTERPRISES.
1998. 03.	Developed & Produced 'ELECTRONIC GRADE SOLVENTS'
2001. 01.	Developed & Produced 'DNA BIOSYNTHESIS SOLVENT'
2001. 02.	**Authorized license for ISO 9001**
2002. 03.	**Authorized license for BGMP** (The Bulk Good Manufacturing Practice for Pharmaceutical)
2002. 05.	Set-up distributor in China
2002. 12.	Built the 2nd Ansan Factory
2006. 06.	**Authorized license for ISO 14001** Built Organic Stripper Recycle Tower for LCD process
2007. 05.	**Licensed Innovation-Business [Inno-Biz]**
2007. 06.	**Established R&D Center**
2007. 11.	**Patent** [Pre- Calsinated Rib Barrier Remover Composition And Mothod For Removing Dielectro Layer Using The Same]
2008. 01.	**Patent** [Pre- Calsinated Dielectro Layer Remover Composition And Mothod For Removing Dielectro Layer Using The Same]
2008. 10.	**Patent** [Pre- Calsinated Rib Barrier And Dielectro Layer Removable Composition, And Method For Removing Rib Barrier And Dielectro Layer Using The Same]
2008. 02.	**Patent** [Manufacturing Method Of Micro-Lens Arraay Mold And Prepareing Process Of Micro-Lens Arraay Using It]
2008. 05.	**Patent** [Etchant Composition For Gold/Titanium Layers And Etching Method Using The Same]
2008. 07.	Launching Chemicals For Solar Cell Process
2008. 12.	Set-up distributors in Asian market
2009~2010	**Patent** [Crystallization Reactor]
	Patent [Recovery Method Of Organic Solvent From Photoresist Removal Waste]

Product
overview classified by areas

Analytical Reagents
High Purity Solvents
Solvents for Eletronics
Electronic materials
Solar cell Process Chemicals

Analytical Reagents

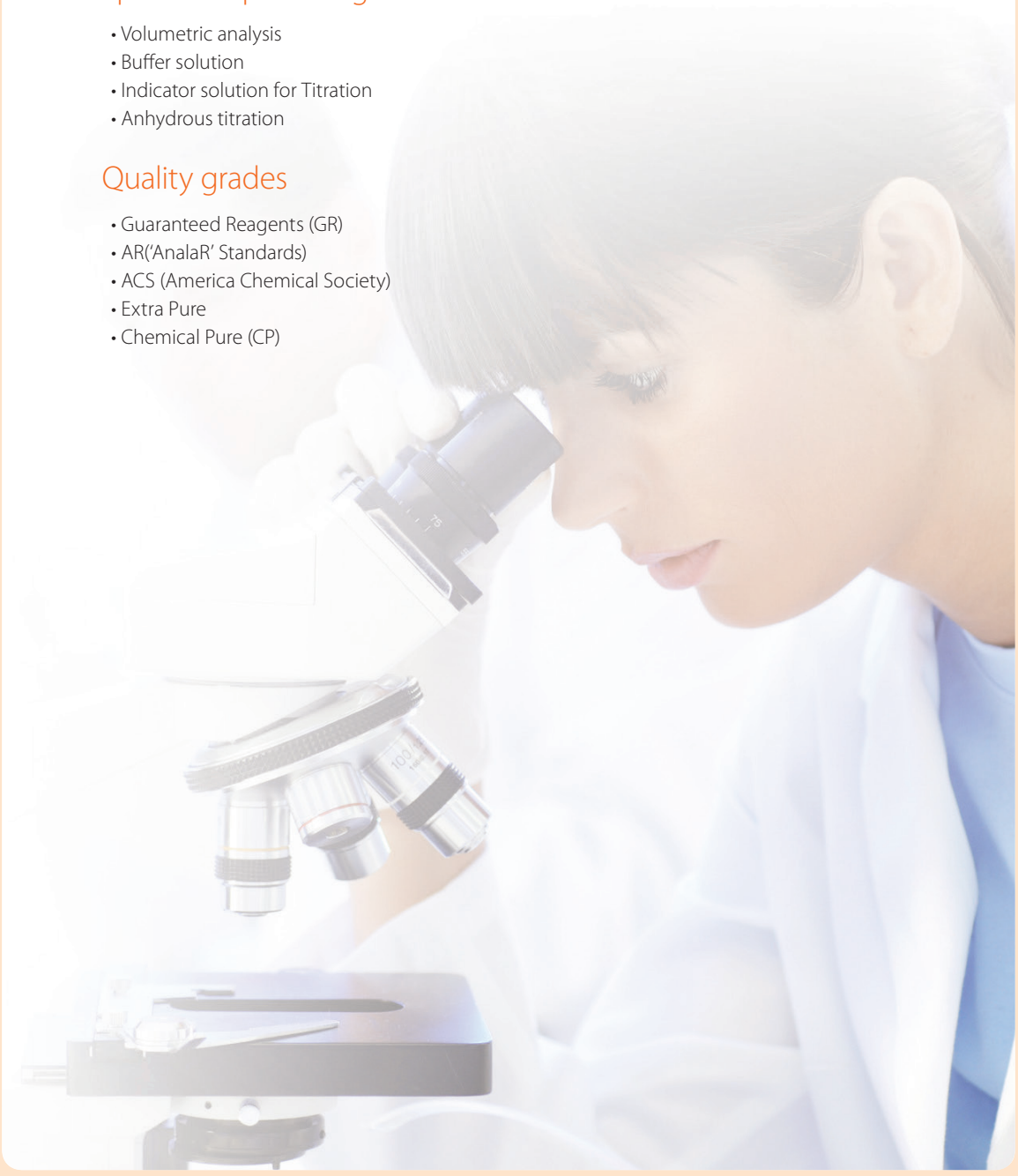
DUKSAN offers about 2,000 kinds of Analytical reagents including
General reagents & Special purpose reagents.

Special Purpose reagents

- Volumetric analysis
- Buffer solution
- Indicator solution for Titration
- Anhydrous titration

Quality grades

- Guaranteed Reagents (GR)
- AR('AnalaR' Standards)
- ACS (America Chemical Society)
- Extra Pure
- Chemical Pure (CP)



Analytical Reagents

Special Purpose reagents

• Volumetric analysis

Product	Concentration	Package	Product No.
Bromine	N/10 (0.05M)	500 ㎖	1012
Ethylenediaminetetraacetic acid, Disodium salt (E.D.T.A–2Na)	M/5	500 ㎖	349
Ethylenediaminetetraacetic acid, Disodium salt	M/10	500 ㎖	355
		1 ℓ	1990
Ethylenediaminetetraacetic acid, Disodium salt	M/20	500 ㎖	354
Ethylenediaminetetraacetic acid, Disodium salt	M/40	500 ㎖	353
Hydrochloric Acid	2N (2M)	500 ㎖	1136
Hydrochloric Acid	1N (1M)	500 ㎖	1137
		1 ℓ	1138
Hydrochloric Acid	N/2 (0.5M)	500 ㎖	1139
Hydrochloric Acid	N/5 (0.2M)	500 ㎖	1117
Hydrochloric Acid	N/10 (0.1M)	500 ㎖	1121
		1 ℓ	1122
Hydrochloric Acid (Ethanol solution)	N/10 (0.1M)	500 ㎖	1119
Hydrochloric Acid (2–Propanol solution)	N/10 (0.1M)	500 ㎖	1120
Hydrochloric Acid	N/20 (0.05M)	500 ㎖	1118
Iodine	N/10 (0.05M)	500 ㎖	1173
Nitric Acid	1N (1M)	500 ㎖	1543
Nitric Acid	N/10 (0.1M)	500 ㎖	1544
Oxalic Acid	1N (0.5M)	500 ㎖	1565
		1 ℓ	2802
Oxalic Acid	N/10 (0.05M)	500 ㎖	1566
		1 ℓ	1567
Perchloric Acid (Acetic acid solution)	N/10 (0.1M)	500 ㎖	1583
Potassium Bromate	N/10 (1/60M)	500 ㎖	346
Potassium Chloride	N/10 (0.1M)	500 ㎖	385
		1 ℓ	387
Potassium Chloride	3.3M	500 ㎖	382
Potassium Dichromate	1N (1/6M)	500 ㎖	446
Potassium Dichromate	N/10 (1/60M)	500 ㎖	450
		1 ℓ	452
Potassium Hydroxide	1N (1M)	1 ℓ	44
Potassium Hydroxide	N/2 (0.5M)	500 ㎖	45
Potassium Hydroxide	N/10 (0.1M)	500 ㎖	47
		1 ℓ	48
Potassium Hydroxide (Ethanol solution)	N/2 (0.5M)	500 ㎖	2358
Potassium Hydroxide (Ethanol solution)	N/10 (0.1M)	500 ㎖	46
Potassium Iodate	N/10 (1/60M)	500 ㎖	513
Potassium Iodide	N/10 (0.1M)	500 ㎖	2729
Potassium Permanganate	1N (0.2M)	500 ㎖	25
Potassium Permanganate	N/2 (0.1M)	500 ㎖	26
		1 ℓ	27
Potassium Permanganate	N/5 (0.04M)	500 ㎖	28
Potassium Permanganate	N/10 (0.02M)	500 ㎖	29
		1 ℓ	30

Product	Concentration	Package	Product No.
Potassium Permanganate	N/40 (0.005M)	500 ㎖	32
		1 ℓ	31
Silver Nitrate	1N (1M)	500 ㎖	902
Silver Nitrate	N/10 (0.1M)	500 ㎖	903
Silver Nitrate	N/20 (0.05M)	500 ㎖	904
	N/100 (0.01M)	500 ㎖	905
Sodium Carbonate	1N (0.5M)	500 ㎖	954
Sodium Carbonate	N/10 (0.05M)	500 ㎖	2443
Sodium Chloride	1N (1M)	500 ㎖	1413
Sodium Chloride	N/10 (0.1M)	500 ㎖	1414
Sodium Chloride	N/100 (0.01M)	500 ㎖	1415
Sodium Hydroxide	5N (5M)	500 ㎖	2856
		1 ℓ	2855
Sodium Hydroxide	2N (2M)	500 ㎖	1446
Sodium Hydroxide	1N (1M)	500 ㎖	1447
		1 ℓ	1448
Sodium Hydroxide	N/2 (0.5M)	500 ㎖	1449
Sodium Hydroxide	N/5 (0.2M)	500 ㎖	1450
Sodium Hydroxide	N/10 (0.1M)	500 ㎖	1451
		1 ℓ	1452
Sodium Hydroxide	N/20 (0.05M)	500 ㎖	1453
Sodium Hydroxide	N/40 (0.025)	500 ㎖	1454
		1 ℓ	1455
Sodium Oxalate	N/10 (0.05M)	500 ㎖	1391
		1 ℓ	1392
Sodium Oxalate	N/40 (0.0125M)	1 ℓ	3011
Sodium Thiocyanate	N/10 (0.1M)	500 ㎖	404
Sodium Thiosulfate	N/2 (0.5M)	500 ㎖	456
Sodium Thiosulfate	N/10 (0.1M)	500 ㎖	453
		1 ℓ	455
Sodium Thiosulfate	N/20 (0.05)	500 ㎖	447
Sodium Thiosulfate	N/40 (0.025)	500 ㎖	443
Sulfuric Acid	2N (1M)	500 ㎖	253
Sulfuric Acid	1N (0.5M)	500 ㎖	254
		1 ℓ	255
Sulfuric Acid	N/2 (0.25M)	500 ㎖	248
Sulfuric Acid	N/5 (0.1M)	500 ㎖	244
Sulfuric Acid	N/10 (0.05M)	500 ㎖	250
		1 ℓ	251
Sulfuric Acid	N/20 (0.025M)	500 ㎖	249
		1 ℓ	2547
Sulfuric Acid	N/100 (0.005M)	500 ㎖	252

Analytical Reagents

Special Purpose reagents

• Buffer solution

Product	Package	Product No.
Buffer Solution Standard pH 2.00	500 ㎖	1021
Buffer Solution Standard pH 3.00	500 ㎖	1022
Buffer Solution Standard pH 4.01	500 ㎖	1023
	1 ℓ	1024
Buffer Solution Standard pH 6.86	500 ㎖	1025
	1 ℓ	1026
Buffer Solution Standard pH 7.00	500 ㎖	1027
	1 ℓ	1028
Buffer Solution Standard pH 9.18	500 ㎖	1029
	1 ℓ	1030

• Indicator solution for Titration

Product	Color range (pH)			Package	Product No.
Alizarin Red S	yellow	3.7 ~ 5.2	red	500 ㎖	612
Alizarin Yellow GG	yellow	10.0 ~ 12.0	yellowish brown	500 ㎖	615
Bromocresol Green	yellow	3.8 ~ 5.4	blue	500 ㎖	1014
Bromophenol Blue	yellow	3.0 ~ 4.6	bluish violet	500 ㎖	1018
Bromothymol Blue	yellow	6.0 ~ 7.6	blue	500 ㎖	1020
Congo Red	blue	3.0 ~ 5.0	red	500 ㎖	1299
m-Cresol Purple	yellow	7.4 ~ 9.0	purple	500 ㎖	1320
2,4-Dinitrophenol	slightly yellow	2.6 ~ 4.0	yellow	500 ㎖	1382
Indigo Carmine	blue	11.6 ~ 4.114.0	yellow	500 ㎖	3000
Methyl Orange	red	3.1 ~ 4.4	yellow	500 ㎖	653
Methyl Red	red	4.2 ~ 6.2	yellow	500 ㎖	1506
Methyl Violet 6B	yellow	0.1 ~ 1.5 ~ 3.2	violet	500 ㎖	2811
Methyl Yellow	red	2.9 ~ 4.0	yellow	500 ㎖	1508
Phenolphthalein	colourless	8.3 ~ 10.0	pink	500 ㎖	1601
Phenol Red	yellow	6.8 ~ 8.4	red	500 ㎖	2307
Thymol Blue	red	1.2 ~ 2.8	yellow	500 ㎖	200
Thymolphthalein	colourless	9.3 ~ 10.5	blue	500 ㎖	199

Product	Package	Product No.
Bromocresol Green-Methyl red	500 ㎖	1015
Diphenylamine, Solution	500 ㎖	1386
Eriochrome Black T, Solution	500 ㎖	1402
Ferroin, Solution	500 ㎖	676
Gentian Violet, Solution	500 ㎖	756
Sudan Ⅲ Solution	500 ㎖	264
Uranine Solution	500 ㎖	2611
Wijs' solution	500 ㎖	4081
	2.5 ℓ	4082

• Anhydrous titration

Product	Package	Product No.
Acetic acid	1 kg	448
Crystal Violet–Acetic acid solution	500 mℓ	2866
Sodium Methoxide 28% solution in Methanol	1 ℓ	1471

Analytical Reagents

Quality grades

- **Guaranteed Reagents (GR)**
- **AR('AnalaR' Standards)**
- **ACS (America Chemical Society)**
- **Extra Pure**
- **Chemical Pure (CP)**

Acetonitrile
HPLC GRADE
Product No. 549
CH3CN
F.W. 41.05
B.P. 82℃
4 ℓ
UN1648
Dichloromethane
PESTICIDE GRADE
CH2Cl2
F.W. 84.93
B.P. 40℃
CAS 75-09-2
1 ℓ
UN1593
REAGENTS
DUKSAN
Chemicals

High Purity Solvents

Since the development of Solvents for HPLC in 1996, DUKSAN has been producing a series of High Purity Solvents.

• High purity with Lot-to-Lot Consistency

LC-MS
Ultimate
HPLC
Pesticide
DNA Biosynthesis

High Purity Solvents

Product	Package	Ultimate	Pesticide
Acetic acid, glacial	4 ℓ		
Acetone	4 ℓ	1761 *	518
Acetonitrile	4 ℓ	2675	1791
Ammonium acetate	1 kg		
Ammonium carbonate	1 kg		
Ammonium phosphate, monobasic	1 kg		
Benzene	4 ℓ	1828	981
1–Butanol	4 ℓ		1877
n–Butyl acetate	4 ℓ		
Chlorobenzene	4 ℓ		
Chloroform, Amylene	4 ℓ	1779	1780
Chloroform, Ethanol	4 ℓ	1782	1272
Cyclohexane	4 ℓ		1332
o–Dichlorobenzene	4 ℓ		
1,2–Dichloroethane	4 ℓ		
Dichloromethane	4 ℓ	1667	580
N,N–Dimethyl Acetamide	4 ℓ		
N,N–Dimethylformamide	4 ℓ		
Dimethyl Sulfoxide	4 ℓ		
1,4–Dioxane	4 ℓ		
Ethanol	4 ℓ		
Ethyl Acetate	4 ℓ	2697	11
Ethyl Ether, Ethanol	4 ℓ	2691	567
n–Heptane 97%	4 ℓ	2052	2053
n–Heptane 99%	4 ℓ	2702	2703
n–Hexane 95%	4 ℓ	1666	821
Isooctane	4 ℓ	1188	1187
Methanol	4 ℓ	2721	63
Methyl–t–Butyl Ether	4 ℓ	2764	2765
Methyl Ethyl Ketone	4 ℓ		
Methyl Isobutyl Ketone	4 ℓ		
N–Methyl–2–Pyrrolidone	4 ℓ		
n–Pentane	4 ℓ	2291	1576
Petroleum Ether (35~60℃)	4 ℓ	1593	1592
Phosphoric acid 85%	1 kg		
Potassium phosphate, monobasic	1 kg		
1–Propanol	4 ℓ		
2–Propanol	4 ℓ	2377	861
Pyridine	4 ℓ		
Sodium acetate, trihydrate	1 kg		
Sodium bicarbonate	1 kg		
Sodium sulfate	500 g		315
Tetrahydrofuran	4 ℓ		
Tetrahydrofuran, BHT	4 ℓ		
Toluene	4 ℓ	1722	184
1,2,4–Trichlorobenzene	3.8 ℓ		
Triethylamine	4 ℓ		
Water	4 ℓ		

* Product No.

HPLC	Bio	Ultra Dry	LC–MS
1755			
515			
549	3362	556 (Water 10) 559 (Water 30)	3040
3033			
3034			
3035			
980			
1047			
1038			
2229			
1781			
1271		1274	
1331			
1680			
425			
577	597		
2964			
1371	1373		
2762	1381		
1356		1358	
76			
3083		1406	
558		570	
2054			
2704			
820		823	
1186			
62	2722	66	3041
1070			
610			
634			
674	2220		
1575			
1591			
3036			
3037			
623			
859			
877	2396	878	
3039			
3038			
218	221		
219			
187		186	
4579			
	2766		
119			3042

Acetone
Electronic High Purity GRADE
REAGENTS
DUKSAN
CH3COCH3
F.W. 58.08
B.P. 56.1 ℃ (at 1013 hpa)
3.8 ℓ
UN1090
High Purity Chemicals
2-Propanol
Electronic High Purity GRADE
REAGENTS
DUKSAN
(CH3)2CHOH
F.W. 60.1
B.P. 83 ℃
3.8 ℓ
UN1219
High Purity Chemicals
DUKSAN PURE CHEMICALS

AQUAZERO

Volumetric
Karl-Fischer Reagents

- Long-term Titer Stability
- Optimized Titration end-Points
- Pyridine free & with pyridine

Ensures accurate & reliable moisture determination

AQUAZERO

Volumetric Karl-Fischer Reagents

One component, Volumetric Karl-Fischer Reagents

AQUAZERO is the Karl Fischer reagents from DUKSAN for volumetric determination of water. AQUAZERO is a solution for laboratories that carry out water content analysis of a sample as it also includes working mediums and dry solvents for sample solubilization.

1. AQUAZERO Composite 5
   : one component Karl-Fischer reagent for general samples.
   : Pyridine-free
   : Titration media --- Dried Methanol
   : Titer --- approx. 5mg water/ml

2. AQUAZERO Composite 2
   : one component Karl-Fischer reagent for general samples.
   : Pyridine-free
   : Titration media --- Dried Methanol
   : Titer --- approx. 2mg water/ml

3. AQUAZERO Composite 5K
   : one component Karl-Fischer reagent for Aldehyde / Ketone samples.
   : Pyridine-free
   : Titration media --- AQUAZERO Medium Keto
   : Titer approx. 5mg water/ml

4. AQUAZERO KFR 5
   : one component Karl-Fischer reagent for general samples.
   : with Pyridine
   : Titer approx. 5mg water/ml

5. AQUAZERO Medium Keto
   : Titration medium with Composite 5K

6. AQUAZERO Methyl Alcohol-Dried

Packaging 6×1L amber glass

REAGENTS DUKSAN

HEAD OFFICE

53, Sinwon-ro 133beongil, Danwon-gu, Ansan-si, Gyeonggi-do, Korea
TEL : +82-31-495-4055 FAX : +82-31-495-4058

URL Address http://www.duksan.kr
E-mail Address Webmaster@duksan.kr

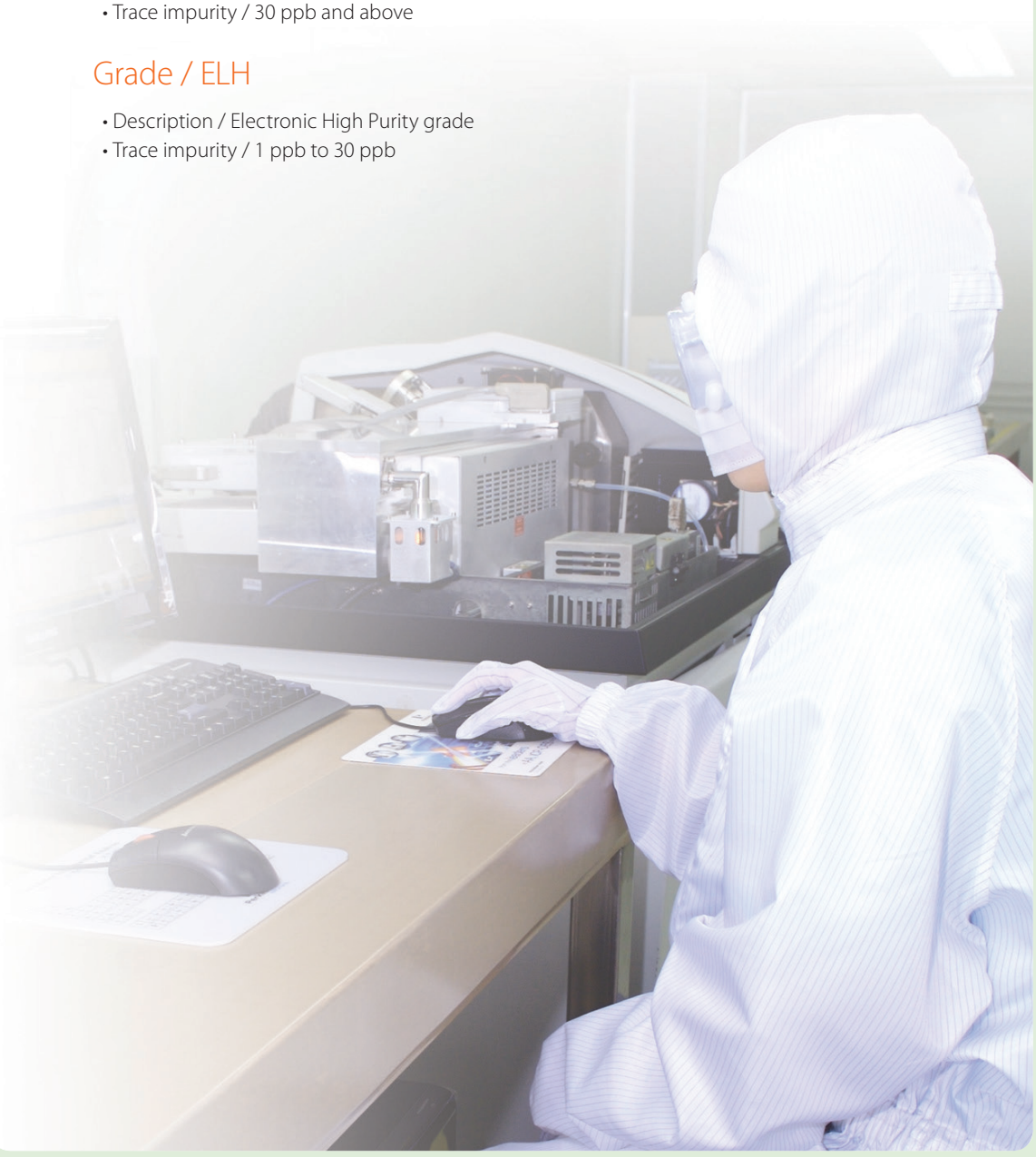
Solvents
for Electronics

Grade / EL

- Description / Electronic grade
- Trace impurity / 30 ppb and above

Grade / ELH

- Description / Electronic High Purity grade
- Trace impurity / 1 ppb to 30 ppb



Solvents for Electronics

• Grade EL & ELH

ITEM	Grade
Acetic acid	EL
Acetone	ELH
2–(2–Aminoethoxy)ethanol	ELH
Ammonia water	EL
n–Butyl acetate	EL
Butyl Carbitol (BDG)	ELH
Gamma–Butyrolactone(GBL)	EL
N,N–Dimethylacetamide (DMAc)	EL
Dimethyl Sulfoxide (DMSO)	ELH
Ethyl Alcohol	ELH
Ethylene Glycol	EL
Ethylene Glycol	ELH
Hydrochloric acid	EL
Hydrofluoric acid	EL
Hydrogen Peroxide	EL
Hydroxylamine Solution	ELH
Methanol	ELH
Methoxydipropanol (DPM)	ELH
1–Methoxy–2–Propanol (PM)	ELH
1–Methoxy–2–Propyl Acetate (PMA)	ELH
n–Methyl–2–Pyrrolidone (NMP)	EL
n–Methyl–2–Pyrrolidone (NMP)	ELH
Monoethanolamine	EL
Nitric acid	EL
Pentamethyldiethylenetriamine (PMDETA)	EL
Phosphoric acid	EL
Potassium Hydroxide 45%	EL
1–Propanol	EL
2–Propanol (IPA)	ELH
Sulfuric acid	EL
Tetramethylammonium Hydroxide 20% (TMAH)	ELH
Tetramethylammonium Hydroxide 25% (TMAH)	ELH
Toluene	EL
Trichloroethylene (TCE)	EL
Xylene	EL

Grade / EL list

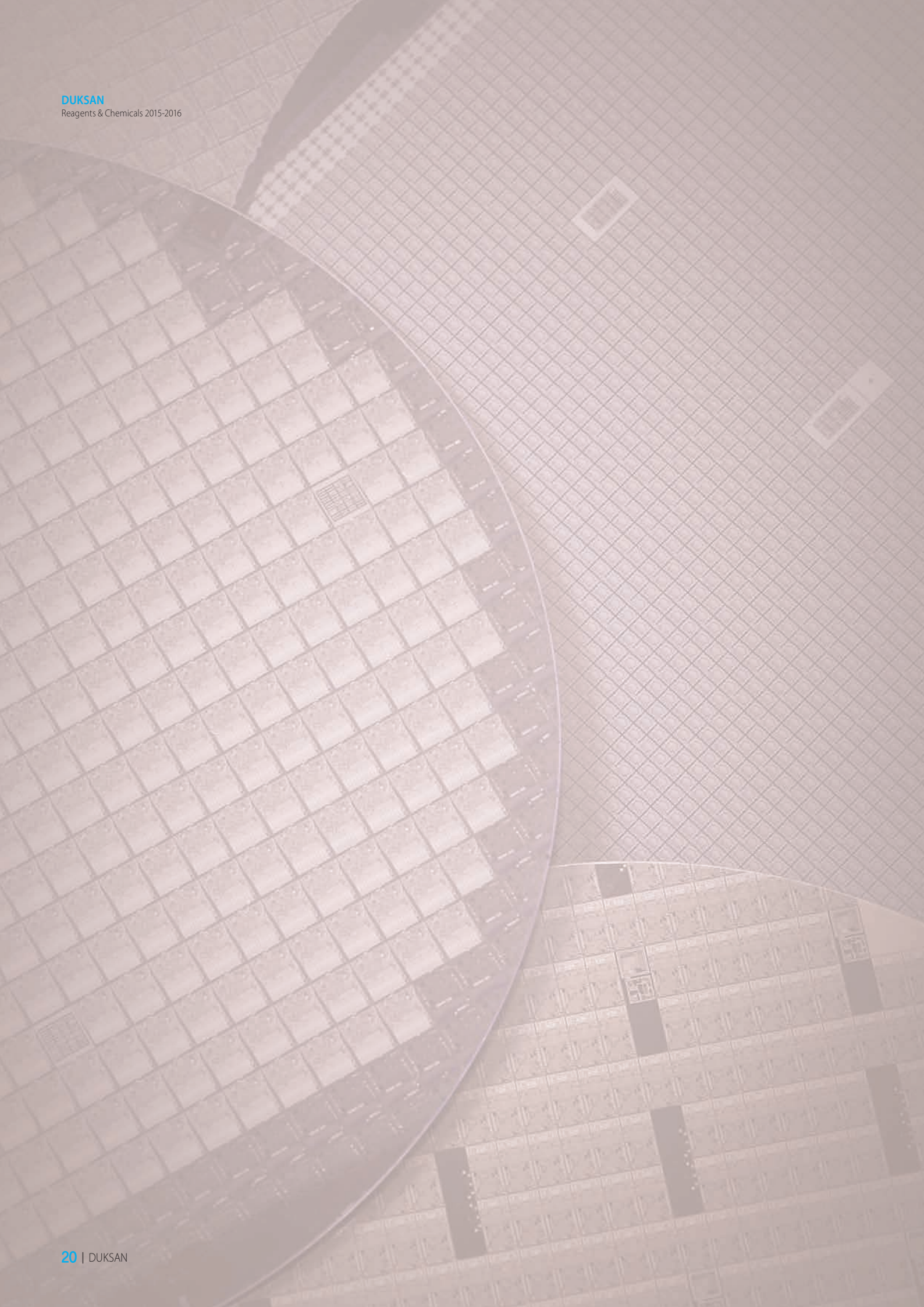
- Description / Electronic grade
- Trace impurity / 30 ppb and above

Acetic acid
Ammonia water
n–Butyl acetate
Gamma–Butyrolactone(GBL)
N,N–Dimethylacetamide (DMAc)
Ethylene Glycol
Hydrochloric acid
Hydrofluoric acid
Hydrogen Peroxide
n–Methyl–2–Pyrrolidone (NMP)
Monoethanolamine
Nitric acid
Pentamethyldiethylenetriamine (PMDETA)
Phosphoric acid
Potassium Hydroxide 45%
1–Propanol
Sulfuric acid
Toluene
Trichloroethylene (TCE)
Xylene

Grade / ELH list

- Description / Electronic High Purity grade
- Trace impurity / 1 ppb to 30 ppb

Acetone
2–(2–Aminoethoxy)ethanol
Butyl Carbitol (BDG)
Dimethyl Sulfoxide (DMSO)
Ethyl Alcohol
Ethylene Glycol
Hydroxylamine Solution
Methanol
Methoxydipropanol (DPM)
1–Methoxy–2–Propanol (PM)
1–Methoxy–2–Propyl Acetate (PMA)
n–Methyl–2–Pyrrolidone (NMP)
2–Propanol (IPA)
Tetramethylammonium Hydroxide 20% (TMAH)
Tetramethylammonium Hydroxide 25% (TMAH)



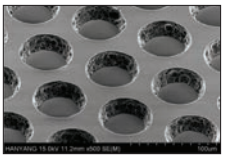
Electronic
materials

Mo/Dielectric Simultaneous Etchant
Al/Mo-Etchant
Au/Ti Simultaneous Etchant on PMMA
Organic Stripper
ITO-Etchant
Cr-Etchant
Glass Cleaner
Rib barrier & Dielectro Layer Remover

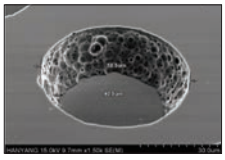
Electronic materials

Mo/Dielectric Simultaneous Etchant

Simultaneous etching for Molybdenum and Dielectric Layer (SiO_2+PbO etc)



Mo780nm+Dielectric Layer 18㎛ Matrix Hole



Dielectric Layer isotropic etching

Outline FED is new generation for FPD business (Flat Panel Display). Especially, FED in FPD need metal etching and dielectric layer etching. Customer can use molybdenum etchant and dielectric layer etchant separately for hole. DSP developed Mo/Dielectric Layer simultaneous etchant with VOC. DSP MD Series chemical is based on inorganic chemical and BOE series and add additives for Mo metal etching speed control and Dielectric layeretching speed.

Properties

■ Mo Etching
- Thickness : 750~800 nm
- Etch Rate : 40 nm/sec
  CD Loss : < 1㎛ (both)
  No under cut

■ Dielectric Layer etching
- Thickness : 17~18㎛
- Etch Rate : 0.08~1.0㎛/sec

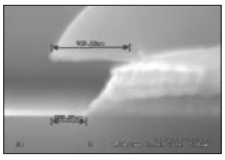
■ Operation Condition
- Temp. : 40±1℃
- Spray Pres. : 2.0~2.5kg/cm^2

Specification

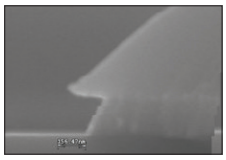
Analysis Items		Specification
Appearance		Colorless Liquid
Total Acidity		55 ~ 57 %
Density(at 25℃)		1.2 ± 0.1
Metal(ppm)	Fe	< 5 ppm
	Ca	< 1 ppm
	K	< 1 ppm

Al/Mo-Etchant

Al/Mo Etching Agent for Flat Panel Display Business (TFT-LCD,OLED)



Al/Mo



Mo

· Temperature of Al/Mo - etchant solution : 40℃
· Sample size :370 X 470 X 0.7t mm glass
· Thickness of Metal(Al + Mo) : 2000+ 500 Å
  Thickness of Metal(Mo) : 2500 Å
· Etching method : spray 1liter/nozzle

Outline FPD Business (Flat Panel Display) is year by year developed. Every day, we see and use TV, computer, mobile phone. Customer needs is more clear display unit. For the best performance FPD request high quality material development.

Properties

■ Al/Mo layer
- Etch time : 60 sec (Just etch : 50 sec)
- Taper : under 60 degree

■ Mo layer
- Etch time : 27 sec (Just etch : 17 sec)
- Taper : under 90 degree
- Improved CD loss uniformity
  than other convention chemicals

Specification

Formula :
H_3PO_4+HNO_3+CH_3COOH+DI water

Ingredient :

H_3PO_4	55.0 ~60.0 wt%
HNO_3	4.0 - 10.0 wt%
CH_3COOH	4.0~15.0 wt%
D.I.water	balance

Physical properties :

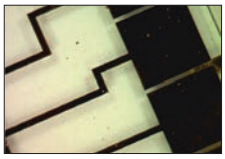
▶Solubility in water	Complete
▶Appearance	Colorless liquid

Ca	< 2.0 ppm
Fe	< 1.0 ppm
K	< 2.0 ppm
Na	< 3.0 ppm
Ni	< 1.0 ppm
Pb	< 1.0 ppm
Sn	< 1.0 ppm
Co	< 1.0 ppm
Cu	< 1.0 ppm
Cd	< 1.0 ppm

Au/Ti Simultaneous Etchant on PMMA

Simultaneously Etching for Gold and Titanium on PMMA

Electro Line before Etching on PMMA



Electro Line after Etching on PMMA

Outline Nowadays Customer develops various Area in Semi-conduct or Bio-Chip. Especially customer want flexible film or Polymer TFT Modules. So gold and silver are very important metal in high softness and conductivity. DSP developed gold and titanium Simultaneous etchant with VOC. DSP AT Series chemical is based on stable polymer layer and non-attack. DSP AT Series can control etch rate and gold /titanium individual etching speed.

Properties

■ Au Etching
- Thickness : 500~700nm
- Etch Rate : 16~20nm/sec

■ Ti Etching
- Thickness : 500~700nm
- Etch Rate : 25~30nm/sec

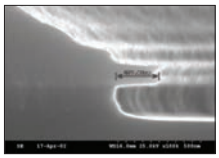
■ Operation Condition
- Temp.: 25±1℃
- Spray Pres. : 2.0~2.5kg/cm^2

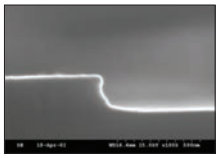
Specification

Analysis Items		Specification
Appearance		Yellow wish Liquid
Total Acidity		45 ~ 50 %
Density(at 25℃)		1.1 ± 0.1
Metal(ppm)	Fe	< 2 ppm
	Ca	< 1 ppm
	K	< 1 ppm

Organic Stripper

Organic Base Photo Resist stripper for FPD Business (TFT-LCD,OLED,PDP,FED)





Outline FPD Business (Flat Panel Display) is Year by Year developed. Every day, we see and use TV, computer, mobile phone. Customer Needs more clear display Unit. For the best Performance FPD, request high quality material development.

Properties

■ Photoresist (positive)
- Posi-PR model : ZPP-1900U3
- Soft baking : 110 ℃, 170 sec
- Thickness of Photoresist : 1.5 um

■ Strip Conditions
- Temperature : 70 ℃
- Strip time : 2 min 40 sec

Specification

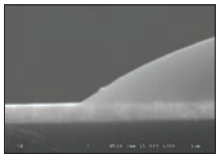
DSPS M250S	Assay (wt%)
N-Methyl Pyrrolidone	10 ~ 40
Butyldiglycol	30 ~ 70
Monoethanol amine	10 ~ 30
Additive	0 ~ 5

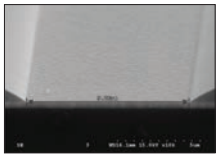
(※The composition is controllable by needs of customers)

Appearance	Clear and colorless
Specific Gravity (20℃)	0.98 ± 0.01
pH (20℃)	12.5 ± 0.5
Alkalinity	4.00 ± 0.50

ITO-Etchant

Indium-Tin Oxide Etching for FPD Business(TFT-LCD,OLED, PDP, FED)

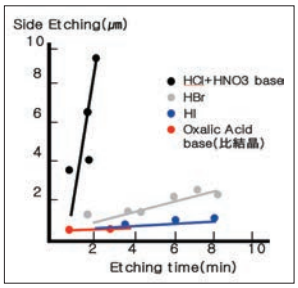




Side Etching

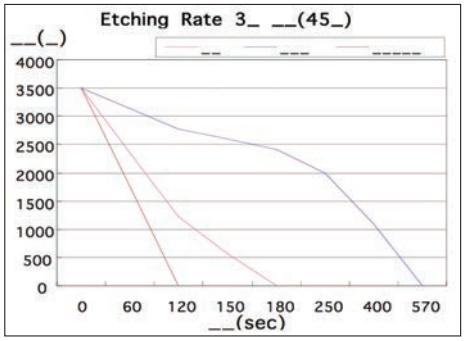
	40℃	45℃	50℃	60℃	
$FeCl_3$ BASE	780	1,140	2,100		結晶形
HCl+HNO_3	600	780	1,200		結晶形
Oxalic type	12.5	18.8	25.0	50.0	結晶形
	675	780	1,335		比結晶形

Side Etching



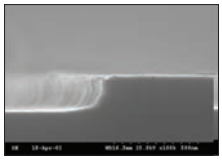
Etch Time / Rate

	HCl +CH_3COOH	HCl +HNO_3	$FeCl_3$ Type
Etch Time	570 sec	180 sec	120 sec
Etch Rate	6 Å / sec	19 Å / sec	29 Å / sec

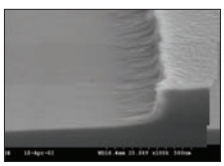


Cr-Etchant

Chromium Etching Agent for Flat Panel Display Business (TFT-LCD,OLED)



· Temperature of Cr Etchant solution : 35℃
· Sample size :370 X 470 X 0.7t mm glass
· Thickness of Cr film : 1500 Å
· Etching method : spray 1 liter / nozzle



Outline Information Business is Most important. So, FPD Business (Flat Panel Display) is Year by Year developed. Every day, we see and use TV, Computer, Mobile Phone. Customer Needs is More Clear Display Unit. For Best Performance FPD, request High Quality Material development

Base Properties

Ce^{4+}/Ce^{3+} Oxidation/Reduction POTENTIAL*

Equilibrium Potential	Media	Remarks
1.70 V	$HClO_4$	very corrosive
1.61 V	HNO_3	very corrosive
1.44 V	H_2SO_4	Ce/SO_4 ppt
1.28 V	HCl	Cl-/Ce Red.

Specification

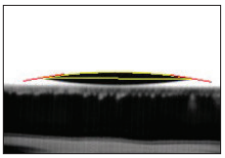
Formula :
CAN+HNO_3($HClO_4$)+DI
Ingredient :
CAN * 9.0 - 15.0 wt%
HNO3* 4.0 - 28.0 wt%
or HClO4
D.I.water balance
Physical properties :
▶SSolubility in water Complete
▶Appearance Orange liquid
▶Odor Chlorine Odor
▶Specific Gravity 1.05 - 1.25

Ca	< 3.0 ppm
Fe	< 3.0 ppm
K	< 3.0 ppm
Na	< 3.0 ppm
Ni	< 1.0 ppm
Pb	< 1.0 ppm
Sn	< 1.0 ppm
Co	< 1.0 ppm
Cu	< 1.0 ppm
Cd	< 1.0 ppm

Electronic materials

Glass Cleaner

Low contact Angle, High elimination Performance FPD Glass Cleaner (LCD, OLED, FED,PDP)



Contact Angle(Average) : 7.17

Contact Angle(Average) : 6.12

Outline FPD business (Flat Panel Display) is year by year developed. FPD basement material is glass. Customer use glass cleaner in every step for Develop, etching, strip PR. So, DSP developed High elimination low contact angle glass cleaner DSPG 6000 model. DSP strategy is revolution of FPD materials, inquire into high techknowledge.

Properties

■ Low Contact Angle
- C.A : under 10degree
- Test Condition
  Temp. : R.T
  Ultra Sonic Time : 90sec

■ High Elimination Ability
- Organic Residues remove
- No Residues in Water

■ Applications Area
- FPD Business Glass Cleaner TFT-LCD, OLED, FED, PDP
- Surface Cleaning

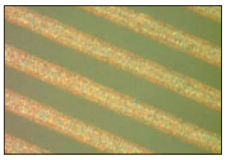
Specification

Analysis Items		Specification
Appearance		Colorless Liquid
pH (at 25℃)		13.0 ± 1.0
Density(at 25℃)		13.0 ± 0.1
Metal(ppm)	Fe	< 10 ppm
	Al	< 5 ppm
	Pb	< 5 ppm

Rib barrier & Dielectro Layer Remover

Simultaneous or Each remove for Rib barrier and Dielectric Layer

Electro Line before Etching on Glass



Electro Line after Etching on Glass

Outline This Series could remove Pre-calsination Rib barrier & Dieletro Layer. It could be recycled defective product of spread on glass. Especially, It dosen't give any damage to electo line on glass. Furthermore, glass cleaning effect can be obtained.

Properties

■ Chemical Condition
- Room temperature, Normal pressure
- Non-dangerous, Non-toxic

Specification

Ethylene Glycol Monobutyl Ether	20.0 ~ 30.0 wt%
N – Methyl -2-Pyrrolidone	3.0 ~ 5.5 wt%
Confidential	Max. 10.0 wt%
Additive A	Max 5.0 wt%
Additive B	Max 1.0 wt%

※Patent No. 10-0864091

※All products could be adjusted to suit conditions of use.

Solar cell
Process Chemicals

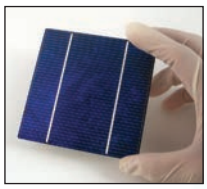
Range of High Purity Photo Voltanic Process Chemicals
Features of DUKSAN Solar cell Chemicals

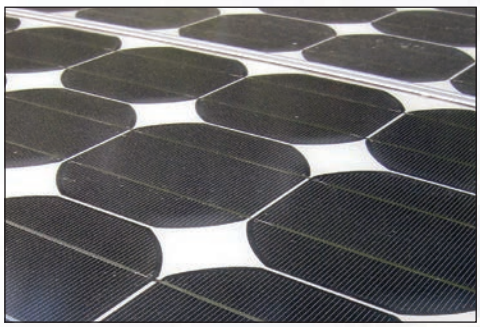
Solar cell Process Chemicals

Improve Efficiency
your solar sell Production

• Range of High Purity Photo Voltanic Process Chemicals

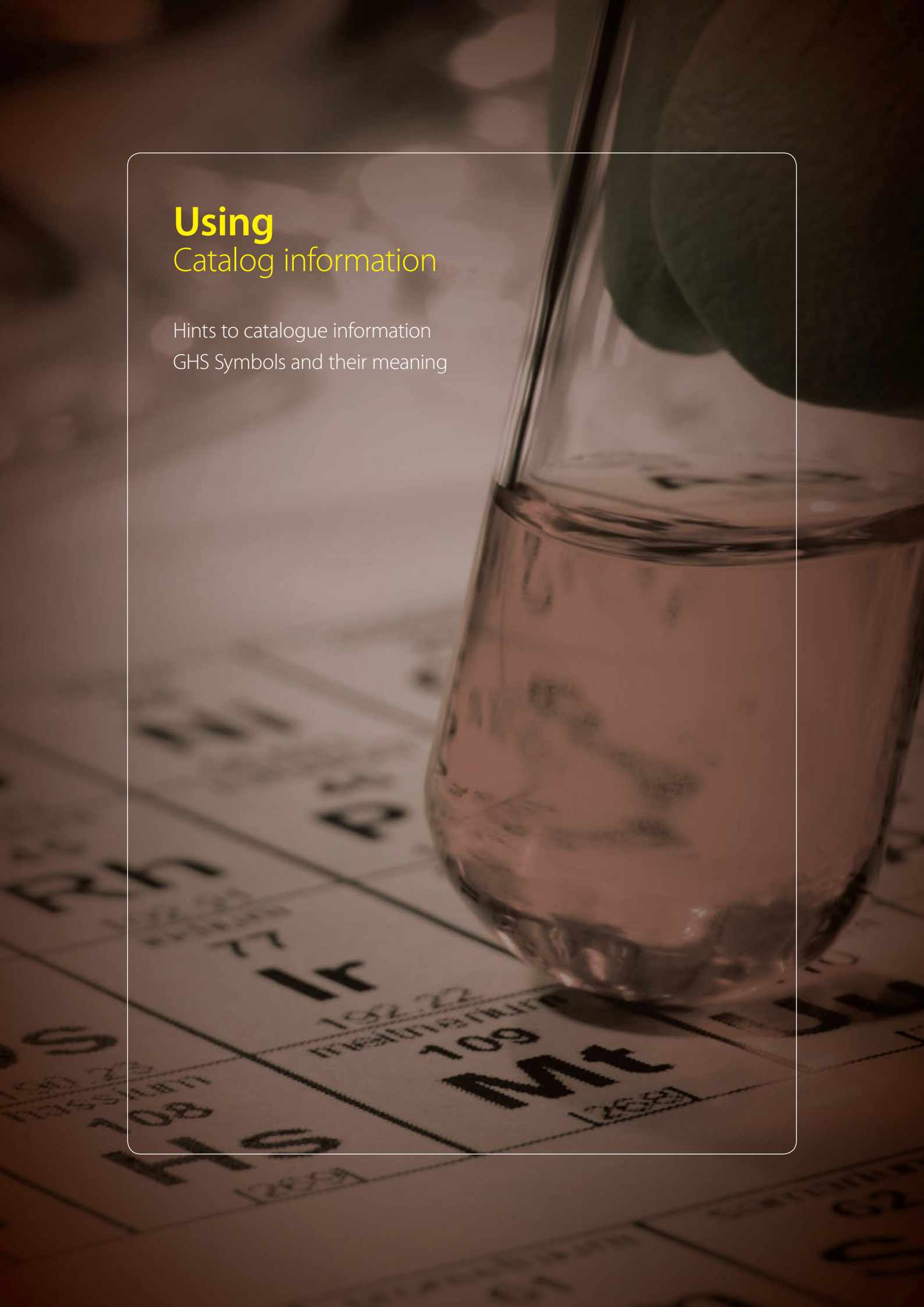
- ▶Hydrofluoric Acid
- ▶Potassium Hydroxide Solution
- ▶Hydrochloric Acid
- ▶Nitric Acid
- ▶Hydrogen Peroxide
- ▶Sodium hydroxide Solution
- ▶Dopant solution (EP-5)
- ▶Isopropyl Alcohol





• Features of DUKSAN Solar cell Chemicals

- ▶High purity & particles free (Ionic Impurities in ppb level)
- ▶Particles free product
- ▶Manufactured under controlled conditions
- ▶Analysis as per International Standards
- ▶On-line availabillity of COA
- ▶On-line availabillity of MSDS
- ▶On site training of chemical safety and handling
- ▶Packaging in 200 liter Drum & Tank Lorry



Using
Catalog information

Hints to catalogue information
GHS Symbols and their meaning

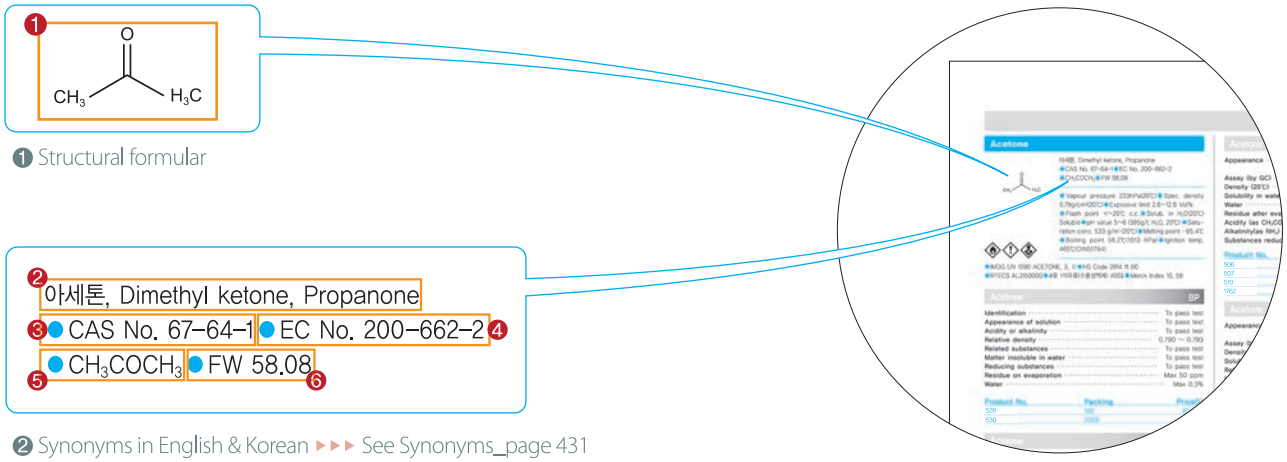
Hints

to catalogue information

GHS

Symbols and their meaning

Hints to catalogue information



❶ Structural formular

❷ Synonyms in English & Korean ▸▸▸ See Synonyms_page 431

❸ CAS NO.
CAS Number is allocated by Chemical Abstracts Servics (CAS) Division of American Chemical Society, USA.
▸▸▸ See CAS Registry Numbers_page 461

❹ EC NO.
The European Commission Number (EC NO.) is the seven-digit Code that is assigned to chemical substances that are commercially available within the European Union.This numbet is assigned by the Commission of the European Community, the EC number is the official number of a substance in the European Union.

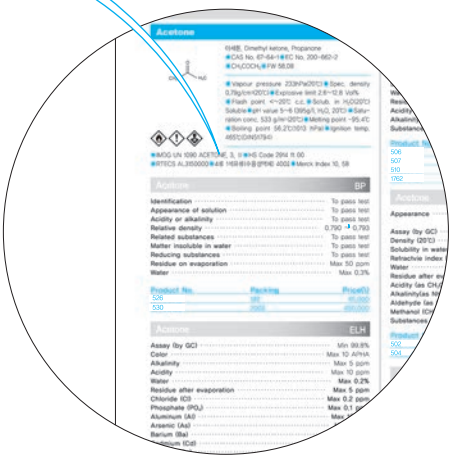
❺ Empirical formular

❻ Molecular Weight

❼ Physical properties

❽ Hazard Symbol ▸▸▸ See GHS Symbols and their meaning_page 032

⑨ IMDG UN 1090 ACETONE, 3, II ⑩ HS Code 2914 11 00
⑪ RTECS AL3150000 ⑫ 4류 1석유류(수용성액체) 400ℓ ⑬ Merck Index 10, 58



⑨ IMDG Code
The International Maritime Dangerous Goods (IMDG) Code was Ddeveloped as a uniform international code for the transport of Dangerous goods by sea covering such matters as packing, container Traffic and stowage, with particular reference to the segregation of Incompatible substances.

⑩ HS Code
Hamonized system of labelling and coding goods in international trade.

⑪ RTECS Number
RTECS (Registry of Toxic Effects of Chemical Substances) Number is issued by National Institute of Occupational Safety and Health (NIOSH, USA)

⑫ 위험물안전관리법
Classified by Korean Hazardous Sunbstances Safety Control Law

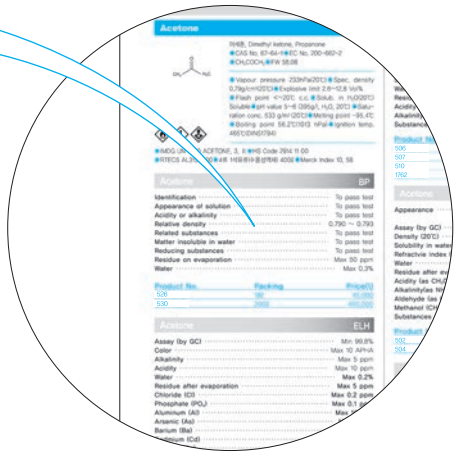
⑬ Merck Index

Acetone — **BP** ⑭

⑮	
Identification	To pass test
Appearance of solution	To pass test
Acidity or alkalinity	To pass test
Relative density	0.790 ~ 0.793
Related substances	To pass test
Matter insoluble in water	To pass test
Reducing substances	To pass test
Residue on evaporation	Max 50 ppm
Water	Max 0.3%

⑯

Product No.	Packing	Price(\)
526	18ℓ	52,500
530	200ℓ	Call



⑭ Quality Grade
- Analytical Reagents ▸▸▸ *GR (Guaranteed Reagent) / AR ('AnalaR' Standards) / ACS (America Chemical) / Extra Pure / CP (Chemical Pure)*
- High Purity Solvents ▸▸▸ *Ultimate / Pesticide / HPLC / Bio / Ultra Dry / LC-MS*
- Solvents for Electonics ▸▸▸ *EL / ELH*
- Pharmaceutical excipients ▸▸▸ *KP (Korea Pharmacopoeia) / USPC (US Pharmacopoeia) / BP (British Pharmacopoeia) / NF (USP National Formulary)*
- FA (Food Additive)

⑮ Test item / specification

⑯ Product No / Packing Unit / Prices in Korean Won(₩) per packing unit

GHS[1)] Symbols and their meaning

	Explosive Self Reactive Organic Peroxides	폭발성 물질 자기반응성 물질 유기 과산화물
	Flammable Self Reactive Pyrophorics Self-Heating Emits Flammable Gas Organic Peroxide	인화성 가스 인화성 에어로졸 인화성 액체, 고체 자기반응성 물질 자연발화성 액체.고체 자기발열성 물질 물 반응성 물질 유기 과산화물
	Acute Toxicity (severe)	급성독성 물질(경구, 경피, 흡입)
	Carcinogen Respiratory Sensitizer Reproductive Toxicity Target Organ Toxicity Mutagenicity Aspiration Toxicity	호흡기 과민성 물질 발암성 물질 생식세포 변이원성 물질 생식 독성 물질 특정 표적장기 독성 물질(1회 노출, 반복노출) 흡인 유해성 물질
	Environmental Toxicity	수생환경 유해성 물질 (급성, 만성)
	Oxidizer	산화성 가스 산화성 액체, 고체
	Gases Under Pressure	고압 가스
	Corrosives	금속부식성 물질 피부 부식성 또는 자극성 물질 심한 눈 손상 또는 자극성
	Irritant Dermal Sensitizer Acute Toxicity(harmful) Narconic Effects Respiratory Tract Irritation	급성독성 물질(경구, 경피, 흡입) 피부 부식성 또는 자극성 물질 피부 과민성 물질 특정 표적장기 독성 물질(1회 노출) 심한 눈 손상 또는 자극성 물질

1) GHS : Globally Hamonized System

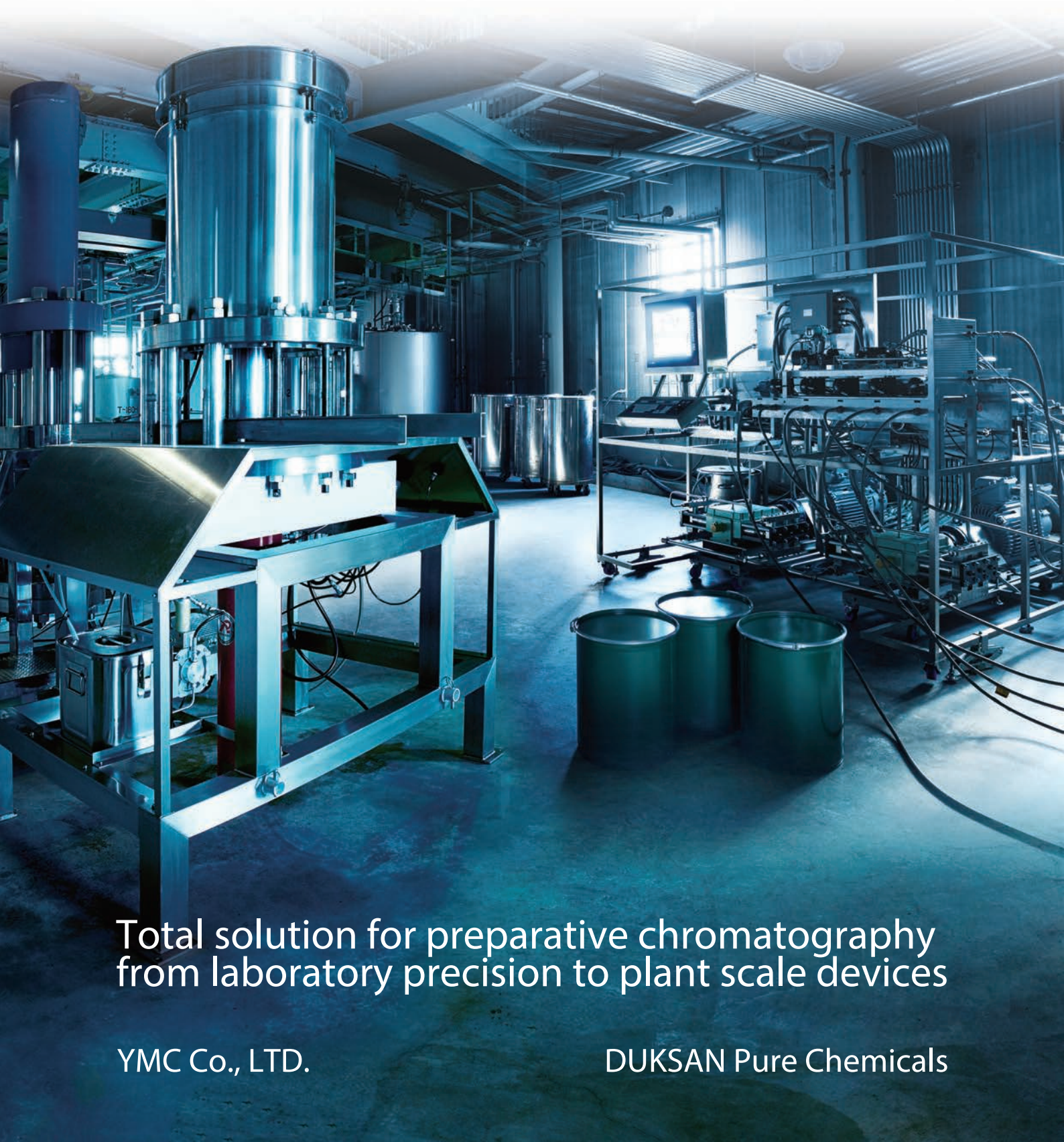
The use of chemical products to enhance and improve life is a widespread practice worldwide. But alongside the benefits of these products, there is also the potential for adverse effects to people or the environment. As a result, a number of countries or organizations have developed laws or regulations over the years that require information to be prepared and transmitted to those using chemicals, through labels or Material Safety Data Sheets (MSDS). While these existing laws or regulations are similar in many respects, their differences are significant enough to result in different labels or MSDS for the same product in different countries. Given the reality of the extensive global trade in chemicals, and the need to develop national programs to ensure their safe use, transport, and disposal, it was recognized that a Globally harmonization system of classification and labeling of chemicals(GHS) would provide the foundation for such programs.

GHS는 위험물 분류와 운송부문에 관하여 물리 화학적 위험성과 급성독성의 분류와 표시사항을 기본으로 하여 위험물안전관리법에 의해 분류된 각각의 위험물을 실정에 맞게 적용하기 위해 정확한 데이터를 확보하고 이를 통해 위험물안전관리법의 분류기준과 GHS에 따른 대응 분류기준을 제시함으로써 국내 및 국제무역시 제도간의 규제 및 표지의 상이함을 통해 나타나는 문제점들을 예방할 수 있을 것이다.

YMC

REAGENTS DUKSAN

PREPARATIVE CHROMATOGRAPHY



Total solution for preparative chromatography
from laboratory precision to plant scale devices

YMC Co., LTD.

DUKSAN Pure Chemicals

Lead to the Future with YMC Separation and Purification Technology

Preparative chromatography is an essential part of the scientist' s toolkit for obtaining highly purified chemical substances. In order to use preparative chromatography effectively, there are many variables to consider when developing and as optimizing protocols. Since its formation in 1980, YMC CO., LTD. has been a pioneer in the field of preparative chromatography concentrating YMC efforts towards improved methods for the preparative purification of high value-added substances. YMC core competencies include detailed knowledge and resources dedicated to the development and production of high performance packing materials, columns, and packing technology. Introduction of new and innovative products has allowed YMC to enjoy a worldwide reputation as the leading supplier of technologies for the preparative chromatography marketplace.
YMC' s solid foundation of knowledge and resources help it propose the most suitable packing materials and columns from our broad of product lineup as well as offer contract services for optimization and/or execution of separation conditions for preparative purifications. YMC is confident about proposing the best separation and purification methods.
YMC is also focusing on development and manufacturing of preparative chromatography devices at its facilities in Japan and provides devices which meet customers' needs. Maintenance and service after installation are ensured.

As a major high-purity solvents producing company in South Korea, DUKSAN, together with YMC, has been developing & servicing in
Preparative chromatography area as follows.
; PREP Solvent
; Distillation tower Engineering & Construction
; Solvent Recycling

YMC Business

YMC and Duksan Pure Chemicals are working to provide our customers the best of purification solutions for large-scale separation and purification for high value-added.

Also, YMC and Duksan Pure Chemicals will be responsible for the design with a Column, Packing Material, System and Solvent for high-purity large separation and purification.

YMC KOREA Co., Ltd.

www.ymckorea.com
www.ymc-group.com

YMC Business

Chromatography Business

YMC is a company that produces directly in research and development column and the packing material, the LC-system required for the HPLC. With this accumulated know-how, YMC is the only chromatography professional company in the world to provide the best solutions to our customers. We are build up for the creation of high value-added products from the LAB Scale to Process Scale about all Line-up. YMC has set a target of [Total Liquid Chromatography Management Provider], we have studied with many customers all over the world.

Flow Chemistry Business

YMC has proposed to [Flow Reaction] chemical reaction solution. Using Micro Flow [Microreactor] is precisely the sample synthesized at high speed was achieved by improving the synthesis reaction time and yield, as well as provide customers with maximum effect in the minimum space of production in the Process Scale.

Scitem Business

YMC Offers [Science + Item] in order to establish a safe and efficient test environment to customers. H2 Canister Hydrogen can be stored safely in the laboratory, offers a new concept of a hydrogen environment for customers to use, such as hydrogen safety, reduced storage space.

Custom Purification Business

YMC has a factory for the production Packing Material, Column, LC System in Komatsu, Japan, And the expansion of the new plant GMP standards in 2015 provided the large separation and purification service requested by the customers.
To optimize your process level can be discussed with experience in advance, based on the result, it can support the actual concept and the basic and detail design building for customers of process development.

Process Scale Separation Technology

We develop, manufacture, and sell separation systems suitable for laboratory-to plant-scale, with the experience of using them in our in-house custom purification services.
We choose the optimal device for each separation/purification project, depending on the target substance, purity and scale required from the wide range of techniques available ranging from a bioprocessing system to a recycling system, an SFC system, and an SMB system, in addition to an explosion-proof system.

Bioprocessing Systems and Columns

Optimal for chromatographic purification for manufacturing a biotechnology-based drug

Separator BioStream

- Completely manufactured in Japan and suitable for cGMP
- Sanitary design for ease of cleaning
- Maximum flow rate : up to 30 L/min
- Can be customized to your needs

YMC Pilot Columns

- All the wetted parts are made of non-metalic materials
- Easy adjustable plunger height
- wide rangeof internal diameters, e.g. 100, 140, 200, etc.
- Many options are also available

Standard flow rate and load according to internal diameters of columns

Column I.D.	4.6	10	20	50	100	200	500	1000
Cross-sectional ratio	1.0	4.7	19	118	473	1,890	11,800	47,300
Flow rate (mL/min)	0.5	2.4	9.5	60	235	950	6,000 (6 L)	24,000 (24 L)
	1.0	4.7	19	120	470	1,900	12,000 (12 L)	47,000 (47 L)
Load (mg)	5	25	100	600	2,500	10,000	60,000 (60 g)	240,000 (240 g)

HPLC Systems and Dynamic Axial Compression Columns

Optimal for purification of low molecular compounds, peptides and chiral compounds

K-Prep systems

- Process volumes from lab- to plant-scale
- Fully automated operation via PC is possible
- Maximum flow rate : Up to 25 L/min
- Compatible with GMP/explosion-proof operation

Axial compression columns DAD/DAU

- Axial compression columns pack automatically
- Superior column performance, endurance and reproducibility achieved by constant pressurization
- Internal diameters from 50 to 1,000mm
- Compatible with GMP/explosion-proof operation

LAB Scale Separation Technology

LC-Forte/R is the world's first preparative system designed for both High-/Low- pressure chromatography. Maximum flow-rate is 50 mL/min with 30 MPa (4,350 psi)!! , supporting recycling function as well as 2-phase gradient operation. LC-Forte/R is the most ideal preparative HPLC system for purification in the crude stage through to the final stage.

Multiple Preparative HPLC System LC-Forte/R

Accurate, Agile, and Powerful All-in-one System for LAB Scale

LC-Forte/R systems

- Low pressure separation mode (MPLC)
- High pressure separation mode (HPLC)
- Recycling separation mode (GPC)
- Maximum flow rate : up to 100 ml/min

YMC Prep Column

- MPLC Cartridge Column
- Prep-LC Column
  Glass, SUS Column

YMC Column Triart Series

YMC-Triart series are next-generation organic hybrid silica based columns, emphasizing versatility. The main features are superior durability, peak shape across all kind of compounds and reproducibility. Having the same selectivity across different particle sizes, smooth method transfer UHPLC and HPLC can be performed. Moreover, various bonded phases supplement performance of C18 phase, and allow separations which C18 columns achieve.

Versatile Hybrid Silica Based HPLC Column

Characteristics of YMC-Triart Series

-C18H37

YMC-Triart C18

Suitable as a first choice column with excellent durability

- Superior peak shape
- Usable over wide range of pH and temperature
- Usable with 100% aqueous mobile phase

-C8H17

YMC-Triart C8

Effective for fast analysis of compounds with low polarity or for separation of isomers

- Compete with the versatility of C18
- Usable over wide range of pH and Temperature
- ideal for separation of isomers or structural analogs

-(CH2)4-

YMC-Triart Phenyl

Effective for separation of compounds with long conjugated system by utilizing π-π interaction

- Unique selectivity due to π-π interaction
- Ideal for separations of aromatic compounds or compounds having long conjugated system
- Excellent resolution without adsorption and tailling

-(CH2)3-

YMC-Triart PFP

Effective for separation for polar compounds or separation of isomers

- Alternative selectivity to C18/C8 due to unique polar interaction
- Superior planar connitive ability / steric selectivity
- Ideal for separations of polar compounds or isomers

-CH2CHCH2
OH OH

YMC-Triart Diol-HILIC

Efffective for separation of highly polar compounds

- Ideal for separation of highly polar compounds, which are hardly retained on a reversed phase column
- Superior durability and usable under wide range of mobile phase conditions
- Excellent reproducibility with less ionic adsorption

YMC-Triart series 1.9µm

UHPLC column for ultra-fast separation and high resolution analysis

- 1.9um column for UHPLC with operating pressure up to 100 Mpa
- Same separation selectivity as 3um and 5um
- simple method transfer between conventional HPLC and UHPLC

YMC-Actus Triart series

Semi-preparative HPLC columns with outstanding column durability

- Enhanced durability by applying axial compression technology
- Packed columns for milligram scale preparative HPLC
- Usable under wide range of mobile phase conditions

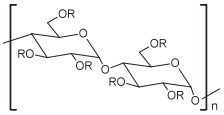
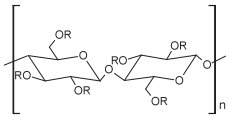
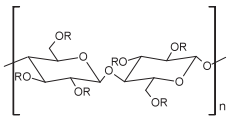
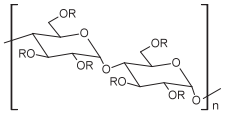
YMC CHIRAL ART Series

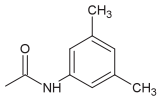
HPLC Column / Packing Material with Polysaccharide Derivatives Chiral Selector

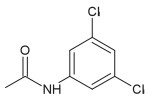
- Applicable to various chiral compounds
- Excellent resolution/durability
- Extremely low initial cost on analysis and purification
- High durability column that is suitable for SFC

Polysaccharide Derivatives Chiral Selector

Immobilized type

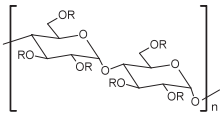
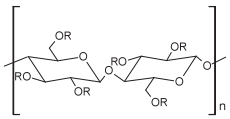
Column/Packing Material	Particle size(um)	Chiral Selector	USP Classification
CHIRAL ART Amylose-SA	3 5 10 20	 Amylose tris(3,5-dimethylphenylcarbamate)	—
CHIRAL ART Cellulose-SB		 Cellulose tris(3,5-dimethylphenylcarbamate)	—
CHIRAL ART Cellulose-SC	5 10 20	 Cellulose tris(3,5-dichlorophenylcarbamate)	—
CHIRAL ART Amylose-SE		 Amylose tris(3,5-dichlorophenylcarbamate)	—

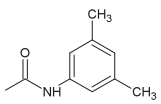

R:
3,5-Dimethylphenylcarbamate


R:
3,5-Dichlorophenylcarbamate

Usable mobile phase	Normal phase	n-hexane, n-heptane, Methanol, Ethanol, 2-propanol , Acetonitrile , ethyl acetate, tetrahydrofuran, dichloromethane, chloroform, t-butyl methyl ether, etc.
	Reversed phase	Acetonitrile, Methanol, Ethanol, 2-propanol, tetrahydrofuran, water, buffer, etc.

Coated type

Column/Packing Material	Particle size(um)	Chiral Selector	USP Classification
CHIRAL ART Amylose-C	5 10 20	 Amylose tris(3,5-dimethylphenylcarbamate)	L51
CHIRAL ART Cellulose-C		 Cellulose tris(3,5-dimethylphenylcarbamate)	L40


R:
3,5-Dimethylphenylcarbamate

Usable mobile phase	n-hexane, n-heptane, 2-propanol, Etanol, Methanol, Acetonitrile, etc.

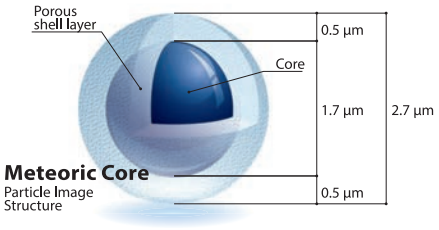
YMC Meteoric Core Series

Meteoric Core is core-shell columns with outstanding resolution for UHPLC & HPLC.
Meteoric Core can be used across a wide pH range and provides excellent peak shape for basic and coordination compounds compared to conventional columns or competitors.
Meteoric Core is ideal for ultra fast and high resolution analysis. Meteoric Core can reduce its backpressure by half compared to sub-2 µm columns with the same resolution as this.
Meteoric Core can be used with conventional HPLC as well as UHPLC.

Core-Shell with Outstanding Resolution for UHPLC & HPLC

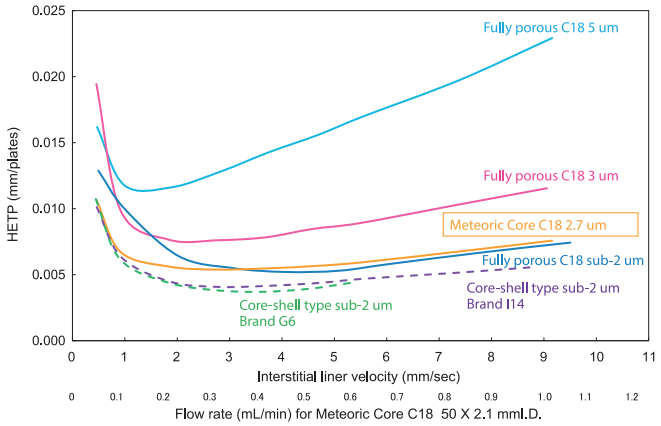
Specification

Name	Meteoric Core C18	Meteoric Core C18 BIO	Meteoric Core C8
Base particle	Core shell type Silica Gel		
Particle Size(µm)	2.7		
Pore Size(nm)	8	16	8
surface area (m^2/g)	150	90	150
Bonding	Trifunctional		
Carbon content (%)	7	5	5
End Capping	Yes		
pH range	1.5-10	1.5-10	1.5-9
USP Classification	L1	L1	L7

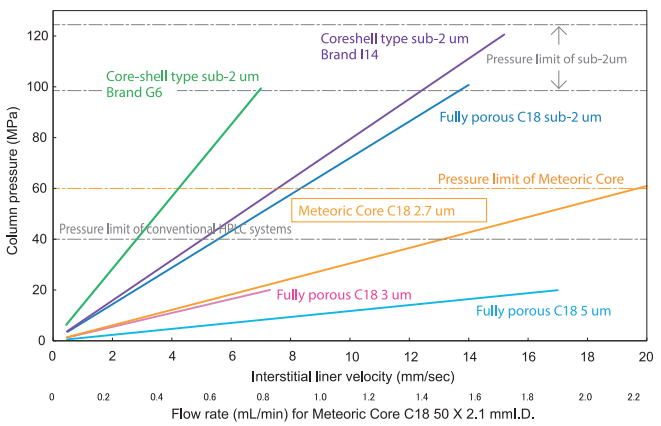


Advantages of Core-Shell Column Packing Material

Van Deemter Curves : Correlation between linear velocity and column efficiency



Column Pressure : Correlation between linear velocity and column backpressure



Meteoric Core C18 has high column efficiency which is almost equivalent to sub-2 um columns over a wide range of flow rate.
The operating pressure of Meteoric Core is one half to one fifths of sub-2 um Core-Shell type columns. High throughput analysis using Meteoric Core could be expected even with longer length columns since the usable maximum flow rate of it is higher than competitors' sub-2 um Core-Shell.

Column	:50 X 2.0 or 2.1 mmI.D.
Eluent	:acetonitrile/water (60/40)
Temperature	:25 ℃
Sample	:butyl benzoate

DUKSAN PREP solvents

optimized solution for Preparative Chromatography

- Low levels of Evaporation residue(<1 mg/l)
- Low UV absorbance
- Low water
- **PREP** solvents

  Acetonitrile, Methanol
  Isopropanol, Ethyl acetate
  n-Hexane, THF, Chloroform

- Versatile Packaging options

  Glass bottle (2.5L, 4L)
  Steel drum (20L, 200L)
  Stainless steel, Returnable (100L, 200L)
  24,000L ISO container

Specification of PREP Acetonitrile

UV Absorbance	Specification	Typical
200nm	Max. 0.30	0.08
220nm	Max. 0.05	0.03
240nm	Max. 0.01	0.007
GC Assay	>99.8 %	>99.9
Water	0.03%	<0.005%
Residue after evaporation	5 ppm	1 ppm

DUKSAN
High Purity Solvents

High purity with
Lot-to-Lot Consistency

Grade	Characteristics	Application
LC-MS	No signals higher than 100ppb Reserpine Low metal concentration (<100ppb) Low particles	LC–MS HPLC
Ultimate	Multi-purpose Highest quality	HPLC (gradient), Gas chromatography Environment testing by GC-ECD/FID Spectrophotometry
Pesticide	Low ECD detectable residue	Pesticide Residue Analysis(GC-ECD), Gas chromatography
HPLC	Low UV Absorbance Low Residue	HPLC (gradient), Gas chromatography, Spectrophotometry, ACS requiring experiment
HPLC, isocratic	Low UV Absorbance, Economical	HPLC (isocratic), Column chromatography, Gas chromatography
Bio	Minimal water content Low impurities (amines…)	Bio synthesis (nucleic acid & peptide synthesis), Anhydrous organic synthesis
Ultra Dry	Minimal water content	Requiring low water application

Acid & Buffers

- Ammonium acetate
- Ammonium carbonate
- Ammonium phosphate, monobasic
- Phosphoric acid 85%
- Potassium phosphate, monobasic
- Sodium acetate trihydrate
- Sodium bicarbonate

Ion-pair reagents

- 1–Dodecane Sulfonic acid Sodium salt
- 1–Heptane Sulfonic acid Sodium salt
- 1–Hexane Sulfonic acid Sodium salt
- 1–Octane Sulfonic acid Sodium salt
- 1–Pentane Sulfonic acid Sodium salt

DUKSAN

Solvent Recycling System

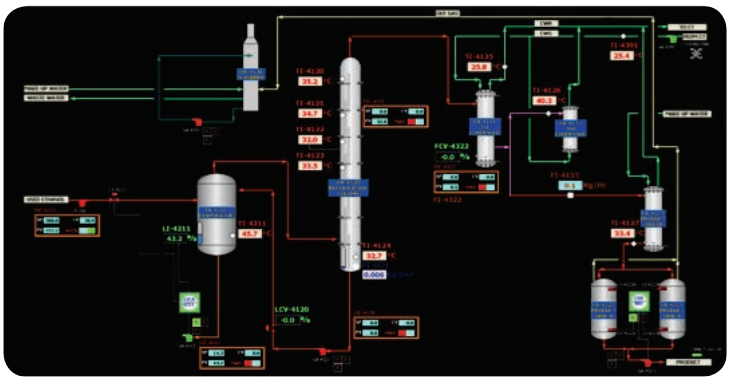
Following the Preparative chromatography, DUKSAN provides distillation equipment to purify the used solvents suitable for reuse in the process.

- **Economical**
  Save the cost for solvents purchasing & disposing

- **Verified & Customer-tailored**
  Besides the distillation equipment, DUKSAN has been managing the used solvents recycle services for Pharmaceutical, Electronics & HPLC application.
  DUKSAN's verified & customer-tailored services helps to be a total solution in the Solvent Recycling.

- **Easy & Safety**
  Control & monitor the operating variables on the program
  Explosion-proof

- **Application**
  Recycling the solvents for Preparative chromatography, Electronic process, Pharmaceuticals, HPLC etc.



Specification

Model	SRS-101	SRS-102
Equivalent YMC instrument	YMC K-Prep LAB	YMC K-Prep FC
Refining method	Distillation through the packed column with basically batchwise, atmosphere pressure operation	
Capacity(L/hr)	around 25	around 150
Material	Borosilicate 3.3	SUS304, 316
Operating temp.(℃)	max 150	max 150
Product Quality	HPLC, Pharmacopoeia, Eletronic	
Dimensions (W×L×H)	700×2200×2500	1200×2200×6000

Duksan

Reagents & Chemicals

Product list
Specification
Prices

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

A

A

Alphabetical list Numbers

List of A

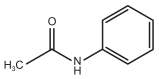
Product	Page
Acetanilide	52
Acetic Acid, glacial	52
Acetic acid 10%	53
Acetic acid 30%	53
Acetic acid ethyl ester	53
Acetic acid isopropyl ester	53
Acetic acid magnesium salt	53
Acetic acid methyl ester	53
Acetic acid n-butyl ester	53
Acetic acid sodium salt	53
Acetic Anhydride	53
Acetocarmine Solution	54
Acetone	54
Acetonitrile	55
Acetyl acetone	56
Acetyl Chloride	56
Acridine Orange	56
Acrylamide	57
Acrylic Acid	57
Acrylic acid 2-ethylhexyl ester	57
Acrylic acid butyl ester	57
Acrylic acid nitrile	57
Acrylonitrile	57
Activated Carbon	57
Adenine	57
Adipic Acid	58
Agar powder	58
DL-Alanine	58
L-Alanine	58
Alcian Blue 8GX	58
Alizarin	58
Alizarine Red S	58
Alizarin Red S solution	58
Alizarin Yellow GG indicator	59
Alizarin Yellow GG Indicator solution	59
Allyl Alcohol	59
Alum ammonium	59
Aluminium Ammonium Sulfate 12-water	59
Aluminium Chloride, anhydrous	59
Aluminium Fluoride	59
Aluminium Hydroxide	59
Aluminium Nitrate nonahydrate	59
Aluminium Oxide activated granule	60
Aluminium Oxide powder	60
Aluminium Powder	60
Aluminium Sulfate crystal 16~18water	60
Aluminum silicate hydrated	60
Aluminum trifluoride	60
Aluminium Tristearate	60

Product	Page
Amberlite IR-120	60
Amberlite IRA-410	60
Amidosulfonic acid ammonium salt	60
Amidosulfuric acid	60
Aminoacetic acid	60
4-Aminoantipyrine	60
Aminobenzene	61
4-Aminobenzenesulfonamide	61
4-Aminobenzenesulfonic acid	61
4-Aminobenzoic acid	61
p-Aminobenzoic acid	61
Aminocyclohexane	61
2-Aminoethanol	61
1-Amino-2-naphthol-4-sulfonic acid	61
N-(2-Aminoethyl) Ethanolamine	61
L-α-Aminoglutaric acid	61
4-Amino-3-hydroxy-1-naphthalenesulfonic acid	61
2-Amino-2-methylpropane	61
2-Aminophenol	61
α-Amino-β-phenyl propionic acid	61
DL-2-Aminopropanoic acid	61
Ammonia Water 28%	61
Ammonium Acetate	62
Ammonium Adipate	62
Ammonium Bicarbonate	62
Ammonium Bichromate	62
Ammonium Bifluoride	62
Ammonium biphosphate	63
Ammonium Bromide	63
Ammonium Carbonate	63
Ammonium Ceric Sulfate	63
Ammonium Cerium(IV) Sulfate dihydrate	63
Ammonium Chloride	63
Ammonium Citrate dibasic	63
Ammonium Dichromate	64
Ammonium dihydrogen Phosphate	64
Ammonium Fluoride	64
Ammonium hydrogen carbonate	64
Ammonium hydrogen Fluoride	64
Ammonium hydroxide solution	64
Ammonium Iron(Ⅲ) Citrate, brown	64
Ammonium Iron(Ⅲ) Sulfate dodecahydrate	64
Ammonium Iron(Ⅱ) Sulfate hexahydrate	64
Ammonium Metavanadate	64
Ammonium Molybdate tetrahydrate	65
Ammonium Nickel(Ⅱ) Sulfate hexahydrate	65
Ammonium Nitrate	65
Ammonium Oxalate monohydrate	65
Ammonium peroxodisulfate	65

Product	Page
Ammonium Persulfate	65
Ammonium Phosphate dibasic	66
Ammonium Phosphate monobasic	66
Ammonium Purpurate	66
Ammonium sulfamate	66
Ammonium Sulfate	66
Ammonium sulfocyanide	66
Ammonium (+)–Tartrate	66
Ammonium Thiocyanate	67
n–Amyl Alcohol	67
Aniline	67
Aniline Blue water soluble	67
Anisole	67
Anthracene	67
Anthrone	68
Antimony(Ⅲ) chloride	68
Antimony(Ⅲ) Oxide	68
Antimony potassium tartrate	68
Antimony Potassium Tartrate hemihydrate	68
Antimony Powder	68
Antimony Trichloride	68
Antimony Trioxide	68
Arabic Gum powder	68
L(+)–Arabinose	69
L–Arginine	69
L–Arginine Monohydrochloride	69
Arsenic Trioxide	69
Arsenic(Ⅲ) Oxide	69
L–Ascorbic Acid	69
L–Ascorbic Acid Sodium Salt	69
L(+)–Aspartic Acid	69

A

Acetanilide GR



아세트아니라이드, N-Phenylacetamide
● CAS No. 103-84-4 ● EC No. 203-150-7
● $CH_3CONHC_6H_5$ ● FW 135.17

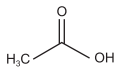
● Vapour pressure ~0.002hPa (20℃) ● Spec. density 1.22 g/cm³(20℃) ● Flash point 173℃ c.c. (DIN51758) ● pH value 5~7 (10g/l, H_2O, 25℃) ● Melting point 115℃ ● Bulk density ~370kg/m³ ● Boiling point 304℃(1013 hPa) ● Ignition temp. 540℃

● IMDG No Dangerous Good ● HS Code 2924 29 00
● Merck Index 10, 41

Appearance	White~Gray color crystal or flaky
Assay	Min 99.0%
Solubility in Ethanol	To pass test
Melting point	114~116 ℃
Ignition residue (as Sulfate)	Max 0.05%

Product No.	Packing	Price(₩)
487	500g	16,500

Acetic Acid, glacial



아세트산(빙초산)
● CAS No. 64-19-7 ● EC No. 200-580-7
● CH_3COOH ● FW 60.05

● Refractive index 1.37(20℃) ● Vapour pressure 15.4hPa (20℃) ● Spec. density 1.05g/cm³(20℃) ● Explosive limit 4~19.9 Vol% ● Flash point 39℃ c.c. ● pH value 2.5 (50g/l, H_2O, 20℃) ● Saturation conc. 38 g/m³ (20℃) ● Melting point 17℃ ● Boiling point 116~118℃(1013 hPa) ● Kin. viscosity 1.17(20℃) ● Ignition temp. 540℃

● IMDG UN 2789 ACEIC ACID, GLACIAL, 8(3), II ● HS Code 2915 21 00
● RTECS AF1225000 ● 4류 2석유류(수용성액체) 2000ℓ ● Merck Index 10, 47

Acetic Acid, glacial — Anhydrous titration

Appearance	Clear, colorless liquid.Strong, vinegar-like Odor.
Assay	Min 99.5%
Solubility in water	To pass test
Freezing point	Min 15.5 ℃
Water	Max 0.5%
Residue after evaporation	Max 0.001%
Chloride (Cl)	Max 1 ppm
Sulfate (as SO_4)	Max 1 ppm
Copper (Cu)	Max 0.5 ppm
Lead (Pb)	Max 0.5 ppm

Product No.	Packing	Price(₩)
448	1kg	10,500

Acetic Acid, glacial — EL

Assay	99.7~99.9%
Color (APHA)	Max 10
Water	Max 0.2%
Chloride (Cl)	Max 1 ppm
Phosphate (PO_4)	Max 1 ppm
Sulfate (SO_4)	Max 0.5 ppm
Aluminum (Al)	Max 100 ppb
Arsenic (As)	Max 5 ppb
Barium (Ba)	Max 100 ppb
Boron (B)	Max 50 ppb
Cadmium (Cd)	Max 100 ppb
Calcium (Ca)	Max 200 ppb
Chromium (Cr)	Max 100 ppb
Cobalt (Co)	Max 100 ppb
Copper (Cu)	Max 10 ppb
Gallium (Ga)	Max 50 ppb
Germanium (Ge)	Max 100 ppb
Gold (Au)	Max 100 ppb
Iron (Fe)	Max 100 ppb
Lead (Pb)	Max 500 ppb
Lithium (Li)	Max 100 ppb
Magnesium (Mg)	Max 100 ppb
Manganese (Mn)	Max 100 ppb
Nickel (Ni)	Max 100 ppb
Potassium (K)	Max 100 ppb
Silicon (Si)	Max 100 ppb
Silver (Ag)	Max 100 ppb
Sodium (Na)	Max 500 ppb
Strontium(Sr)	Max 100 ppb
Tin(Sn)	Max 100 ppb
Zinc (Zn)	Max 100 ppb
Particle Count (0.5 micron and above)	Max 100 pcs/ml

Product No.	Packing	Price(₩)
438	4kg	15,000
430	20kg	70,000
3995	3.8ℓ	30,000

Acetic Acid, glacial — ELH

Assay	Min 99.8%
Water	Max 0.2%
Aluminum (Al)	Max 10 ppb
Arsenic (As)	Max 5 ppb
Barium (Ba)	Max 10 ppb
Boron (B)	Max 10 ppb
Cadmium (Cd)	Max 1 ppb
Calcium (Ca)	Max 20 ppb
Chromium (Cr)	Max 2 ppb
Cobalt (Co)	Max 1 ppb
Copper (Cu)	Max 1 ppb
Gallium (Ga)	Max 10 ppb
Germanium (Ge)	Max 10 ppb
Gold (Au)	Max 1 ppb
Iron (Fe)	Max 20 ppb
Lead (Pb)	Max 1 ppb
Lithium (Li)	Max 1 ppb
Magnesium (Mg)	Max 10 ppb
Manganese (Mn)	Max 1 ppb
Nickel (Ni)	Max 5 ppb
Potassium (K)	Max 10 ppb
Silicon (Si)	Max 10 ppb
Silver (Ag)	Max 1 ppb
Sodium (Na)	Max 100 ppb
Strontium(Sr)	Max 1 ppb
Sulfur (S)	Max 10 ppb
Tin(Sn)	Max 20 ppb
Zinc (Zn)	Max 10 ppb
Particle Count (0.5 micron and above)	Max 30 pcs/ml

Acetic Acid, glacial — Extra Pure

Appearance	Clear, colorless liquid.Strong, vinegar-like Odor.
Assay	Min 99.0%
Solubility in water	To pass test
Freezing point	Min 15.0 ℃
Residue after evaporation	Max 0.01%
Chloride (Cl)	Max 0.001%
Sulfate (SO_4)	Max 0.002%
Lead (Pb)	Max 4 ppm
Iron (Fe)	Max 5 ppm

Product No.	Packing	Price(₩)
410	500g	4,300
414	1kg	5,000
418	20kg	50,000

Acetic Acid, glacial GR

Appearance ····· Clear, colorless liquid.Strong, vinegar-like Odor.
Assay ····· Min 99.7%
Solubility in water ····· To pass test
Freezing point ····· Min 15.5 ℃
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.001%
Chloride (Cl) ····· Max 1 ppm
Sulfate (SO_4) ····· Max 1 ppm
Copper (Cu) ····· Max 0.5 ppm
Lead (Pb) ····· Max 0.5 ppm
Iron (Fe) ····· Max 0.5 ppm
Acetic Anhydride ····· Max 0.1%
Substances reducing Dichromate ····· Max 0.005%

Product No.	Packing	Price(₩)
406	1kg	8,800
3839	2.5 ℓ	12,500
3577	4 ℓ	15,600

Acetic Acid, glacial HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
254nm ····· Max 1.00
256nm ····· Max 0.80
280nm ····· Max 0.05
350nm ····· Max 0.02
UV Cutoff ····· Max 254 nm
Assay (by GC) ····· Min 99.7%
Color (APHA) ····· Max 10
Water ····· Max 0.1%
Residue after evaporation ····· Max 5 ppm
Titrable base ····· Max 0.0004 mEq/g
Dilution test ····· To pass test
Acetic Anhydride ····· Max 0.01%
Chloride (Cl) ····· Max 1 ppm
Sulfate (SO_4) ····· Max 1 ppm
Heavy Metals (as Pb) ····· Max 0.5 ppm
Iron (Fe) ····· Max 0.2 ppm
Substances reducing dichromate ····· To pass test
Substances reducing permanganate ····· To pass test

Product No.	Packing	Price(₩)
1755	4 ℓ	25,000

Acetic Acid, glacial KP

성상 ····· 이 약은 무색의 맑은 휘발성의 액이거나 색 또는 흰색의 결정성 덩어리로 자극성의 특이한 냄새가 있다. 이 약은 물, 에탄올 또는 에테르와 섞인다.
비점 ····· 약 118℃
비중 d20/20 ····· 약 1.049
확인시험 ····· 수용액(1→3)에 청색리트머스 시험지를 적색으로 변화. 아세트산염의 정성반응을 나타냄.
응고점 ····· Min 14.5 ℃
염화물 ····· 검액 10ml에 질산은시액 5방울을 넣을 때 액은 혼탁하지 않는다.
황산염 ····· 검액 10ml에 염화바륨시액 1ml를 넣을 때 액은 혼탁하지 않는다.
중금속 ····· Max 5 ppm
과망간산칼륨환원성물질 ····· 액의 적색은 30분 이내에 없어지지 않는다.
증발잔유물(105℃, 1시간) ····· 1.0mg/10ml
함량 ····· 99.0~101.0%

Product No.	Packing	Price(₩)
427	1kg	5,000
444	20kg	50,000

Acetic Acid, glacial FA

Product No.	Packing	Price(₩)
4270	20kg	37,500

Acetic Acid 10 % Solution

Assay ····· 10.0~10.3%

Product No.	Packing	Price(₩)
394	1 ℓ	7,000

Acetic Acid 30 % Solution

Assay ····· 30.0~33.0%

Product No.	Packing	Price(₩)
1750	1 ℓ	8,800

Acetic acid ethyl ester → *go to Ethyl Acetate*

Acetic acid isopropyl ester → *go to Iso-Propyl Acetate*

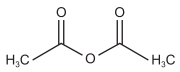
Acetic acid magnesium salt
→ *go to Magnesium acetate tetrahydrate*

Acetic acid methyl ester → *go to Methyl Acetate*

Acetic acid n-butyl ester → *go to n-Butyl Acetate*

Acetic acid sodium salt → *go to Sodium Acetate anhydrous*

Acetic Anhydride Extra Pure



아세트산, 무수
● CAS No. 108-24-7 ● EC No. 203-564-8
● $(CH_3CO)_2O$ ● FW 102.09

● Vapour pressure 4hPa (20℃) ● Spec. density 1.08 g/cm³(20℃) ● Explosive 2.0~10.2 Vol% ● Flash point 49℃ c.c.(DIN51758) ● Solub. in H_2O(20℃) (hydrolysis) (rigorous reaction) ● pH value ~3 (10g/l, H_2O, 20℃) ● Melting point -73℃

● Boiling point 138~140.5℃(1013 hPa) ● Ignition temp. 330℃(DIN51794)

● IMDG UN 1715 ACTIC ANHYDRIDE, 8(3), II ● HS Code 2915 24 00
● 4류 2석유류(비수용성액체) 1000ℓ ● Merck Index 10, 48

Appearance ····· Clear, colorless liquid. Strong acetic odor.
Assay ····· Min 93.0%
Residue after evaporation ····· Max 0.03%
Chloride (Cl) ····· Max 0.001%
Phosphate (PO_4) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.0015%
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%
Substances reducing permanganate ····· To pass test

Product No.	Packing	Price(₩)
463	500g	6,900
464	1kg	11,300
3539	3.8 ℓ	29,300
465	20kg	87,500

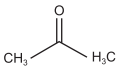
A

Acetocarmine Solution — Solution

아세토카민 용액

Product No.	Packing	Price(₩)
500	500㎖	21,000

Acetone



아세톤, Dimethyl ketone, Propanone
● CAS No. 67-64-1 ● EC No. 200-662-2
● CH_3COCH_3 ● FW 58.08

● Vapour pressure 233hPa(20℃) ● Spec. density 0.79g/cm³(20℃) ● Explosive limit 2.6~12.8 Vol% ● Flash point <~20℃ c.c. ● Solub. in H_2O(20℃)Soluble ● pH value 5~6 (395g/l, H_2O, 20℃) ● Saturation conc. 533 g/m³ (20℃) ● Melting point −95.4℃ ● Boiling point 56.2℃(1013 hPa) ● Ignition temp. 465℃(DIN51794)

● IMDG UN 1090 ACETONE, 3, II ● HS Code 2914 11 00
● RTECS AL3150000 ● 4류 1석유류(수용성액체) 400ℓ ● Merck Index 10, 58

Acetone — BP

Appearance	Volatile, Clear, Colourless liquid.
Solubility	miscible with water, with alcohol
Appearance of solution	Clear and colourless solution
Acidity or alkalinity	Pink color with NaOH solution Red or Orange color with HCl solution
Relative density (at 20℃)	0.790 ~ 0.793
Related substances	
Methanol (v/v)	Not more than 0.05%
2-Propanoll (v/v)	Not more than 0.05%
Benzene (v/v)	Not more than 2 ppm
Any other impurity (v/v)	Not more than 0.05%
Matter insoluble in water	Solution is clear
Reducing substances	Mixture is not completely decolourised
Residue on evaporation	Not more than 50 ppm
Water	Not more than 0.3%

Product No.	Packing	Price(₩)
526	18ℓ	52,500
530	200ℓ	Call

Acetone — ELH

Assay (by GC)	Min 99.8%
Color	Max 10 APHA
Alkalinity	Max 5 ppm
Acidity	Max 10 ppm
Water	Max 0.2%
Residue after evaporation	Max 5 ppm
Chloride (Cl)	Max 0.2 ppm
Phosphate (PO_4)	Max 0.1 ppm
Aluminum (Al)	Max 10 ppb
Arsenic (As)	Max 5 ppb
Barium (Ba)	Max 1 ppb
Cadmium (Cd)	Max 1 ppb
Calcium (Ca)	Max 1 ppb
Chromium (Cr)	Max 2 ppb
Cobalt (Co)	Max 1 ppb
Copper (Cu)	Max 1 ppb
Iron (Fe)	Max 5 ppb
Lead (Pb)	Max 5 ppb
Lithium (Li)	Max 1 ppb
Magnesium (Mg)	Max 1 ppb
Manganese (Mn)	Max 1 ppb
Nickel (Ni)	Max 1 ppb
Potassium (K)	Max 5 ppb
Silver (Ag)	Max 1 ppb
Sodium (Na)	Max 20 ppb
Strontium (Sr)	Max 1 ppb
Zinc (Zn)	Max 1 ppb
Particle Count (0.5 micron and above)	Max 30 pcs/ml

Product No.	Packing	Price(₩)
533	3.8ℓ	13,800
534	20ℓ	62,500
535	200ℓ	Call

Acetone — Extra Pure

Appearance	Clear, volatile liquid
Assay (by GC)	Min 99.5%
Density (20℃)	0.789~0.792 g/ml
Solubility in water	To pass test
Water	Max 0.4%
Residue after evaporation	Max 0.002%
Acidity (as CH_3COOH)	Max 0.003%
Alkalinity(as NH_3)	Max 0.001%
Substances reducing permanganate (as O)	To pass test

Product No.	Packing	Price(₩)
506	500㎖	4,400
507	1ℓ	7,500
510	18ℓ	47,500
1762	200ℓ	Call

Acetone — GR

Appearance	Clear, volatile liquid
Assay (by GC)	Min 99.5%
Density (20℃)	0.789~0.792 g/ml
Solubility in water	To pass test
Refractvie index (n 20 D)	1.358~1.360
Water	Max 0.3%
Residue after evaporation	Max 5 ppm
Acidity (as CH_3COOH)	Max 0.002%
Alkalinity(as NH_3)	Max 0.001%
Aldehyde (as HCHO)	Max 0.002%
Methanol (CH_3OH)	Max 0.05%
Substances reducing permanganate (as O)	Max 2 ppm

Product No.	Packing	Price(₩)
1763	500㎖	5,000
502	1ℓ	8,000
4124	2.5ℓ	14,300
3051	3.8ℓ	18,800
504	18ℓ	50,000

Acetone — HPLC

Meets ACS Specification	
Ultraviolet Spectrophotometry	
Maximum UV Absorbance	
330nm	Max 1.00
340nm	Max 0.06
350nm	Max 0.01
UV Cutoff	Max 330 nm
Assay (by GC)	Min 99.7%
Color (APHA)	Max 10
Water	Max 0.2%
Residue after evaporation	Max 1.0 ppm
Titratable Acid	Max 0.0003 mEq/g
Titratable Base	Max 0.0006 mEq/g
Solubility in water	To pass test
Substances reducing permanganate	To pass test
Aldehyde(as HCHO)	Max 0.002%
Methanol(as CH_3OH)	Max 0.05%
Isoproply alcohol[$(CH_3)_2CHOH$]	Max 0.05%

Product No.	Packing	Price(₩)
515	4ℓ	28,800

Acetone PESTICIDE

Extraction-Concentration Suitability
- ECD Detectable residue (as Heptachlor epoxide) ···· Max 10 ppt

Assay (by GC) ···· Min 99.5%
Color (APHA) ···· Max 10
Water ···· Max 0.5%
Residue after Evaporation ···· Max 5 ppm

Product No.	Packing	Price(₩)
518	4 ℓ	32,500

Acetone Ultimate

Extraction-Concentration Suitability
- ECD Detectable residue (as Heptachlor epoxide) ···· Max 10 ppt
- FID Detectable residue (as 2-Octanol) ···· Max 5 ppb

Ultraviolet Spectrophotometry
- Maximum UV Absorbance
  - 330nm ···· Max 1.00
  - 340nm ···· Max 0.06
  - 350nm ···· Max 0.01
  - UV Cutoff ···· Max 330 nm

Assay (by GC) ···· Min 99.9%
Color (APHA) ···· Max 10
Water ···· Max 0.2%
Residue after Evaporation ···· Max 1 ppm
Fluorescence Background ···· To pass test
Titratable Acid ···· Max 0.0003 meq/g
Titratable Base ···· Max 0.0006 meq/g
Solubility in water ···· To pass test
Substances Reducing Permanganate ···· To pass test
Aldehyde (as HCHO) ···· Max 0.002%
Methanol (as CH_3OH) ···· Max 0.05%
Isopropyl Alcohol [as $(CH_3)_2CHOH$] ···· Max 0.05%

Product No.	Packing	Price(₩)
1761	4 ℓ	37,500

Acetonitrile

아세토니트릴, Methyl Cyanide
- CAS No. 75-05-8 • EC No. 200-835-2
- CH_3CN • FW 41.05
- Refractive index 1.3442 (20℃) • Vapour pressure 97hPa (20℃) • Spec. density 0.786 g/cm³(20℃)
- Explosive limits 3.0~17 vol% • Flash point 2℃ c.c
- Solubility in H_2O (20℃) soluble • Saturation conc. 163g/m³ • Melting point -45.7℃ • Boiling point 81.6℃
- Ignition temp. 524℃

- IMDG UN1648 ACETONITRILE, 3, II • HS Code 2926 90 00
- RTECS AL7700000 • 4류 제1석유류 (수용성액체) 400ℓ • Merck Index 10, 62

Acetonitrile Extra Pure

Appearance ···· Clear Liquid, Peculiar smell, mixable(Water, Ether, Ethanol)
Assay (by GC) ···· Min 99.5%
Solubility in water ···· To pass test
Density (20℃) ···· 0.780 ~ 0.784 g/ml
Refractive index (n 20 D) ···· 1.343 ~ 1.346
Water ···· Max 0.2%
Residue after evaporation ···· Max 0.01%
Acidity (as CH_3COOH) ···· Max 0.02%
Hydrogen cyanide (as CN) ···· To pass test
Substances reducing permanganate ···· To pass test

Product No.	Packing	Price(₩)
544	500㎖	9,000
546	1 ℓ	16,300
547	18 ℓ	106,300

Acetonitrile HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
- Maximum UV Absorbance
  - 190 nm ···· Max 1.00
  - 195 nm ···· Max 0.15
  - 200 nm ···· Max 0.05
  - 205 nm ···· Max 0.04
  - 210 nm ···· Max 0.02
  - 220 nm ···· Max 0.01
  - 254 nm ···· Max 0.009
  - UV Cutoff ···· Max 190 nm

LC Gradient Suitability
Gradient Elution test ···· To pass test
Assay (by GC) ···· Min 99.9%
Color (APHA) ···· Max 10
Water ···· Max 0.01%
Residue after evaporation ···· Max 1 ppm
Titratable Acid ···· Max 0.008 mEq/g
Titratable Base ···· Max 0.0006 mEq/g

Product No.	Packing	Price(₩)
549	4 ℓ	56,250

Acetonitrile PESTICIDE

Extraction-Concentration Suitability
- ECD Detectable residue (as Heptachlor epoxide) ···· Max 10 ppt

Assay (by GC) ···· Min 99.8%
Color (APHA) ···· Max 10
Water ···· Max 0.05%
Residue after Evaporation ···· Max 5 ppm

Product No.	Packing	Price(₩)
2957	2.5 ℓ	40,000
1791	4 ℓ	56,300

Acetonitrile Ultimate

Extraction-Concentration Suitability
- ECD Detectable residue (as Heptachlor epoxide) ···· Max 10 ppt
- FID Detectable residue (as 2-Octanol) ···· Max 5 ppb

Ultraviolet Spectrophotometry
- Maximum Absorbance
  - 190 nm ···· Max 1.00
  - 195 nm ···· Max 0.15
  - 200 nm ···· Max 0.05
  - 205 nm ···· Max 0.04
  - 210 nm ···· Max 0.02
  - 220 nm ···· Max 0.01
  - 254 nm ···· Max 0.009
  - UV Cutoff ···· Max 190 nm

LC Gradient Suitability
Gradient Elution test ···· To pass test
Assay (by GC) ···· Min 99.9%
Color (APHA) ···· Max 10
Water ···· Max 0.01%
Residue after evaporation ···· Max 1 ppm
Fluorescecce Background ···· To pass test
Titratable Acid ···· Max 0.008 mEq/g
Titratable Base ···· Max 0.0006 mEq/g

Product No.	Packing	Price(₩)
2675	4 ℓ	47,500

A

Acetonitrile GR

Appearance ···· Clear Liquid, Peculiar smell, mixable(Water, Ether, Ethanol)
Assay (by GC) ···· Min 99.5%
Solubility in Water ···· To pass test
Density (at 20℃) ···· 0.780 ~ 0.784 g/ml
Refractive index (at 20℃) ···· 1.343 ~ 1.346
Water ···· Max 0.1%
Residue after evaporation ···· Max 0.005%
Acidity (as CH_3 COOH) ···· Max 0.01
Hydrogen cyanide (as CN) ···· To pass test
Substances reducing Permanganate ···· To pass test

Product No.	Packing	Price(₩)
4283	2.5 ℓ	34,500
3030	4 ℓ	52,300

Acetonitrile LC-MS

LC-MS Suitability
ESI+ mode (as Reserpine) ···· Max 50 ppb
ESI- mode (as 4-Nitrophenol) ···· Max 50 ppb
Assay (by GC) ···· Min 99.9%
Color (APHA) ···· Max 10
Water ···· Max 0.01%
Residue after evaporation ···· Max 1 ppm
Titrable acid ···· Max 0.008 meq/g
Titrable base ···· Max 0.0006 meq/g
Ultraviolet Spectrophotometry
Maximum UV Absorbance
190nm ···· Max 1.00
195nm ···· Max 0.15
200nm ···· Max 0.05
205nm ···· Max 0.04
210nm ···· Max 0.02
220nm ···· Max 0.01
254nm ···· Max 0.005
LC Gradient Suitability ···· To pass test
Metal impurities ···· To pass test
Aluminum (Al) ···· Max 25 ppb
Barium (Ba) ···· Max 5 ppb
Cadmium (Cd) ···· Max 5 ppb
Calcium (Ca) ···· Max 25 ppb
Chromium (Cr) ···· Max 5 ppb
Cobalt (Co) ···· Max 5 ppb
Copper (Cu) ···· Max 5 ppb
Iron (Fe) ···· Max 5 ppb
Leed (Pb) ···· Max 5 ppb
Magnesium (Mg) ···· Max 25 ppb
Manganese (Mn) ···· Max 5 ppb
Litium (Li) ···· Max 5 ppb
Nickel (Ni) ···· Max 5 ppb
Potassium (K) ···· Max 25 ppb
Silver (Ag) ···· Max 5 ppb
Sodium (Na) ···· Max 50 ppb
Tin (Sn) ···· Max 5 ppb
Zinc (Zn) ···· Max 5 ppb

Product No.	Packing	Price(₩)
3040	4 ℓ	87,500

Acetonitrile ACS

Appearance ···· Clear
Assay ···· Min 99.5%
Color(APHA) ···· Max 10
Residue after Evaporation ···· Max 0.005%
Titrable Acid ···· Max 0.008 meq/g
Titrable Base ···· Max 0.0006 meq/g
Water ···· Max 0.3%

Product No.	Packing	Price(₩)
3073	4 ℓ	37,500

Acetonitrile (Water 10) Ultra Dry

Assay (by GC) ···· Min 99.8%
Color(APHA) ···· Max 10
Water ···· Max 10 ppm
Residue after Evaporation ···· Max 5 ppm

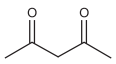
Product No.	Packing	Price(₩)
556	4 ℓ	87,500

Acetonitrile (Water 30) Ultra Dry

Assay ···· 99.9 ~ 100.0%
Color(APHA) ···· Max 10.0
Fluorescence Background ···· To pass test
Refractive Index (n 25 D) ···· 1.3405 ~ 1.3425g
Water ···· Max 0.003%
Density (n 25 D) ···· 0.775 ~ 0.778 g/ml
Titratable Acid ···· Max 0.008 meq/g
Titratable Base ···· Max 0.0006 meq/g
Non - volatile matter ···· Max 0.0001%

Product No.	Packing	Price(₩)
559	4 ℓ	62,500

Acetyl acetone GR



아세틸아세톤, 펜탄디온, Pentane-2,4-dione, ACAC
● CAS No. 123-54-6 ● EC No. 204-634-0
● $CH_3COCH_2COCH_3$ ● FW 100.12

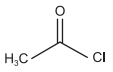
● Vapour pressure 9hPa (20℃) ● Spec. density 0.97 g/cm³ (20℃) ● Explosive limits 2.4 ~ 11.4%(V) ● Flash point 40.5℃ ● Solub. in H_2O 200 g/ℓ(20℃) ● pH value 6 (200 g/ℓ, H2O, 20℃) ● Saturation conc. 38 g/cm³ (20℃) Air ● Melting point -23℃ ● Boiling point 138~140℃

● IMDG UN2310 PENTANE-2,4-DIONE, 3(6.1), III ● HS Code 2914 19 90
● 4류 2석유류 1000ℓ

Appearance ···· Clear~Yellowish liquid
Assay ···· Min 99.0
Water ···· Max 0.2%
Residue after Evaporation ···· Max 0.03%
Solubility in water ···· To pass test
Solubility in Ethanol ···· To pass test
Density (at 20℃) ···· 0.971 ~ 0.976 g/ml
Refractive Index (at 20) ···· 1.450 ~ 1.454

Product No.	Packing	Price(₩)
4076	1 ℓ	32,500

Acetyl Chloride Extra Pure



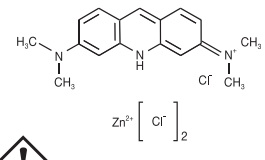
염화아세틸
● CAS No. 75-36-5 ● EC No. 200-835-2
● CH_3COCl ● FW 78.50

● Vapour pressure 320hPa (20℃) ● Spec. density 1.10 g/cm³(20℃) ● Explosive limits 7.3~19 vol% ● Flash point 5℃ c.c ● Solub. in H_2O (20℃) (rigorous reaction) (decomposition) ● Melting point -112℃ ● Boiling point 52℃ ● Ignition temp. 390℃ (DIN51794)

● IMDG UN1717 ACETYL CHLORIDE, 3 (8), II ● HS Code 2915 90 00
● RTECS AO3690000 ● 4류 1석유류(비수용성액체) 200ℓ ● Merck Index 10, 79

Product No.	Packing	Price(₩)
581	500g	12,500

Acridine Orange Extra Pure NEW



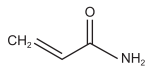
아크리딘 오렌지, Basic Orange 14
● CAS No. 10127-02-3 ● EC No. 233-353-6
● $C_{17}H_{20}Cl_3N_3Zn$ ● FW 438.11

● Solub. in H_2O 28 g/l (20℃) ● pH value 3.9 (10g/l, H_2O, 20℃) ● Melting point 165℃ ● Bulk density ~200kg/m³

● IMDG NO Dangerous Good ● HS Code 3204 13 00

Product No.	Packing	Price(₩)
5100	25g	75,000

Acrylamide — Extra Pure



아크릴아마이드, 2-Propenamide
● CAS No. 79-06-1 ● EC No. 201-173-7
● H_2C=CHCOOH ● FW 71.08

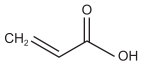
● Vapour pressure 0.009hPa (20℃) ● Spec. density 1.127 g/cm³(25℃) ● Solub. in H_2O 2040 g/l (25℃) ● pH value 5.0~6.5 (50 g/l, H_2O, 20℃) ● Melting point 84℃ ● Bulk density ~500kg/m³ ● Boiling point 125℃(33.3 hPa)

● IMDG UN2074 ACRYLAMIDE, SOLID, 6, 1, Ⅲ ● HS Code 2924 19 00
● RTECS AS3325000 ● Merck Index 10, 125

Appearance ····· Colourless~White crystalline powder
Assay ····· Min 98.0%
Melting point ····· Max 86.0 ℃
Solubility in water ····· To pass test
Iron(Fe) ····· Max 1 ppm

Product No.	Packing	Price(₩)
1856	25g	7,000
582	500g	12,000

Acrylic Acid — GR



아크릴산, 2-Propenoic acid, Acroleic acid
● CAS No. 79-10-7 ● EC No. 201-177-9
● H_2C = CHCOOH ● FW 72.06

● Vapour pressure 3.8hPa (20℃) ● Spec. density 1.05 g/cm³(20℃) ● Explosive limits 3.9~19.8 vol% ● Flash point 46℃(DIN51755) ● Solub. in H_2O 1000 g/l (25℃) ● pH value 2.1 (7.06 g/l, H_2O, 20℃) ● Saturation conc. 12.6 g/m³(20℃) ● Melting point 13℃ ● Boiling point 141℃(1013 hPa) ● Ignition temp. 390℃ (DIN51794)

● IMDG UN2218 ACRYLIC ACID, STABILIZED, 8, (3), Ⅱ ● HS Code 2916 11 00
● RTECS AS4375000 ● 4류 2석유류(비수용성액체) 2000ℓ ● Merck Index 10, 126

Appearance ····· Colourless liquid, characteristic odor.
Solubility in water ····· To pass test
Assay ····· Min 99.0%
Freezing point ····· Min 11.5 ℃
Density (20/4℃) ····· 1.048~1.052 g/ml
Water ····· Max 1.0%

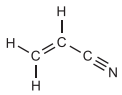
Product No.	Packing	Price(₩)
1858	500g	8,800

Acrylic acid 2-ethylhexyl ester → *go to 2-Ethyl Hexyl Acrylate*

Acrylic acid butyl ester → *go to Butyl Acrylate*

Acrylic acid nitrile → *go to Acrylonitrile*

Acrylonitrile — Extra Pure



아크릴로나이트릴, Acrylic acid nitrile, Vinyl cyanide
● CAS No. 107-13-1 ● EC No. 203-466-5
● H_2C = CHCN ● FW 53.06

● Vapour pressure 124hPa (20℃) ● Spec. density 0.81 g/cm³(20℃) ● Explosive limits 2.8~28 vol% ● Flash point -4.4℃ ● Solub. in H_2O 73 g/l (20℃) ● pH value 6.0~7.5 (50 g/l, H_2O, 20℃) ● Melting point 83.55℃ ● Boiling point 77.3℃(1013 hPa) ● Water absorption 320 g/kg (20℃) ● Ignition temp. 480℃ (DIN51794)

● IMDG UN1093 ACRYLONITRILE, STABILIZED, 3, (6, 1), Ⅰ ● HS Code 2926 10 00
● RTECS AT5250000 ● 4류 1석유류(비수용성액체) 200ℓ ● Merck Index 10, 127

Appearance ····· To pass test
Assay ····· Min 99.0%
Density (20℃) ····· 0.804~0.807 g/ml
Refractive index (n 20 D) ····· 1.387~1.390
Water ····· Max 0.5%
Acidity ····· Max 0.002%
Acetone ····· Max 0.03%
Acteonitrile ····· Max 0.05%

Product No.	Packing	Price(₩)
585	500㎖	8,800
586	1ℓ	12,500

Activated Carbon

활성탄소, Charcoal Activated
● CAS No. 7440-44-0 ● EC No. 231-153-3 ● C

● Spec. density ~1.8-2.1 g/cm³(20℃) ● Solub. in H_2O (20℃) insoluble ● pH value ~5-7 (50 g/l, H_2O, 20℃) ● Bulk density ~200-300 kg/m³

● IMDG No Dangerous Good ● HS Code 3802 10 00
● RTECS FF5250100

Activated Carbon, granule — CP

Appearance ····· Black Crystal or crystalline powder
Chloride (Cl) ····· Max 0.15%
Sulfate (SO_4) ····· Max 0.2%

Product No.	Packing	Price(₩)
589	500g	8,800

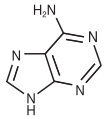
Activated Carbon, powder — CP

Appearance ····· Black Crystal or crystalline powder
Chloride (Cl) ····· Max 0.15%
Sulfate (SO_4) ····· Max 0.2%

Product No.	Packing	Price(₩)
591	500g	8,800

Adenine — Extra Pure

NEW

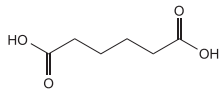


아데닌, Vitamin B4, 6-Aminopurine
● CAS No. 73-24-5 ● EC No. 200-796-1
● $C_5H_5N_5$ ● FW 135.13

● IMDG UN2811 ● HS Code 2933 59 90

Product No.	Packing	Price(₩)
5101	25g	41,000

Adipic Acid — Extra Pure



아디픽산, Hexanedioic acid
● CAS No. 124-04-9 ● EC No. 204-673-3
● $HOOC(CH_2)_4COOH$ ● FW 146.14

● Vapour pressure 0.097hPa (18.5℃) ● Spec. density 1.360 g/cm³(25℃) ● Flash point 196℃ ● Solub. in H_2O 15 g/l (20℃) ● pH value 2.7 (25 g/l, H_2O, 25℃) ● Melting point 152~154℃ ● Bulk density ~700kg/m³ ● Boiling point ~330℃(1013 hPa) ● Ignition temp. 405℃ (DIN51794)

● IMDG No Dangerous Good ● HS Code 2917 12 00

Appearance ····· White crystalline powder
Assay ····· 99.6~101.0%
Water ····· Max 0.2%
Melting point ····· 151.5~154.0 ℃
Heavy metals(as Pb) ····· Max 10 ppm

Product No.	Packing	Price(₩)
593	500g	7,500
595	25kg	181,300

Agar powder — Extra Pure

한천, 분말
● CAS No. 9002-18-0 ● EC No. 232-658-1

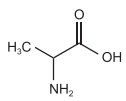
● Solub. in H_2O 20 g/l (60℃) ● pH value 6.8 (100 g/l, H_2O, 20℃) ● Melting point 90℃ ● Bulk density ~550kg/m³

● IMDG No Dangerous Good ● HS Code 1302 31 00
● RTECS AW7950000 ● Merck Index 10, 169

Appearance ···· Milk-white powder or twine in shape, Is insoluble in water. But Absorbs water and expands.
Loss on drying(at.105 ℃, 2hr.) ····· Max 23%
Ignition residue (as Sulfate) ····· Max 4%
Heavy metals (as Pb) ····· Max 0.01%
Iron(Fe) ····· Max 0.015%
Substances invisible iodine ····· To pass test
Jelly strength ····· 450~600 g/㎠

Product No.	Packing	Price(₩)
601	500g	34,500

DL-Alanine — GR



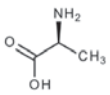
DL-알라닌, DL-2-Aminopropanoic acid
● CAS No. 302-72-7 ● EC No. 206-126-4
● $CH_3CH(NH_2)COOH$ ● FW 89.09

● Spec. density 1.42 g/cm³(20℃) ● Solub. in H_2O 167 g/l (25℃) ● pH value 5.5~6.5 (100 g/l, H_2O, 20℃) ● Melting point 264~296℃ (decomposition) ● Bulk density ~580kg/m³

● IMDG No Dangerous Good ● HS Code 2922 49 00

Product No.	Packing	Price(₩)
605	25g	5,300

L-Alanine — Extra Pure NEW



L-알라닌
● CAS No. 56-41-7 ● EC No. 200-273-8
● $C_3H_7NO_2$ ● FW 89.09

● Spec. density 1.40 g/cm³ (20 ℃) ● Solub. in H_2O 166.5 g/l (25 ℃) ● pH value 5.5 – 6.5 (100 g/l, H_2O, 20 ℃) ● Melting point 295 – 297 ℃ (decomposition) ● Bulk density ~ 660 kg/m³

● IMDG NO Dangerous Good ● HS Code 2922 49 95
● RTECS AY2990000

Product No.	Packing	Price(₩)
5102	25g	9,400
5103	500g	120,000

Alcian Blue 8GX — Extra Pure NEW

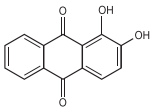
알시안블루 8GX
● CAS No. 33864-99-2 ● EC No. 251-705-7

● Solub. in H_2O_8 g/l (20℃)

● IMDG NO Dangerous Good ● HS Code 3204 19 00

Product No.	Packing	Price(₩)
5104	25g	225,000

Alizarin — Extra Pure / AR NEW



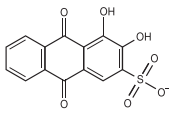
알리자린, 1,2-Dihydroxyanthraquinone
● CAS No. 72-48-0
● $C_{14}H_8O_4$ ● FW 240.22

● Solub. in H_2O(20℃)Soluble

● HS Code 3212 90 90

Product No.	Packing	Price(₩)
5105	25g	52,500

Alizarine Red S — Indicator NEW



알리자린레드 S지시약
● CAS No. 130-22-3 ● EC No. 204-981-8
● $C_{14}H_7NaO_7S$ ● FW 342.26

● IMDG NO Dangerous Good ● HS Code 3204 12 00 ● RTECS CB1095300

Appearance ····· Red powder.
Solubility in water ····· To pass test
Loss on drying (at 105℃) ····· Max 10%
Absorbance(20mg/l, pH 3.2 ····· Min 0.27
pH range ····· 3.7(Yellow) ~ 5.2(Orange Red)

Product No.	Packing	Price(₩)
5068	25g	16,300

Alizarin Red S solution — Indicator solution

알리자린레드 S용액
● CAS No. 130-22-3 ● CI-58005
● $C_{14}H_7O_7S \cdot H_2O$ ● FW 360.28

Product No.	Packing	Price(₩)
612	500㎖	13,500

Alizarin Yellow GG — Indicator

알리자린옐로우 GG
● CAS No. 584-42-9 ● CI-14025
● $C_{13}H_8N_3NaO_5$ ● FW 309.22

Product No.	Packing	Price(₩)
614	25g	15,000

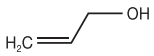
Alizarin Yellow GG — Indicator solution

알리자린옐로우 GG용액

Product No.	Packing	Price(₩)
615	500㎖	11,400

NEW

Allyl alcohol — GR



알릴알코올, 2-Propen-1-ol
● CAS No. 107-18-6 ● EC No. 203-470-7
● C_3H_6O ● FW 58.07

● Vapour pressure 24.3 hPa (20℃) ● Spec. density 0.85 g/cm³(20℃) ● Explosive limits 2.5~18 vol% ● Flash point 22℃ c.c ● Solub. in H_2O (20℃) ● Melting point -129 ℃ ● Boiling point 97 ℃ ● Ignition temp. 375℃

● IMDG UN 1098 ALLYL ALCOHOL, 6.1 (3), I ● HS Code 2905 29 10
● RTECS BA5075000 ● 4류 2석유류 ● Merck Index 10, 279

Product No.	Packing	Price(₩)
5106	500㎖	10,900
5729	1ℓ	Call

Alum ammonium → *go to Aluminium Ammonium Sulfate 12-water*

Aluminium Ammonium Sulfate 12-water — Extra Pure

암모늄명반, Aluminium Ammonium Sulfate, Alum ammonium, Ammonium alum
● CAS No. 7784-26-1 ● EC No. 232-055-3
● $AlNH_4(SO_4)_2 \cdot 12H_2O$ ● FW 453.33

● Solub. in H_2O 150 g/l (20℃) ● pH value ~2.6 (100 g/l, H_2O, 25℃) ● Melting point 93℃ ● Bulk density ~700-800kg/m³ ● Boiling point 120℃

● IMDG No Dangerous Good ● HS Code 2833 30 00
● Merck Index 10, 317

Appearance ····· Transparent crystals or white crystalline powder, Slightly soluble in water and glycerin.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.006%
Heavy metals (as Pb) ····· Max 0.004%
Iron (Fe) ····· Max 0.003%
Substances not precipitated by NH_4OH ····· Max 0.2%
Arsenic (As) ····· Max 2 ppm

Product No.	Packing	Price(₩)
636	500g	8,800

Aluminium Chloride, anhydrous — CP

염화알루미늄
● CAS No. 7446-70-0 ● EC No. 231-208-1
● $AlCl_3$ ● FW 133.34

Product No.	Packing	Price(₩)
4113	500g	8,800

Aluminium Fluoride — CP

플루오르화알루미늄, Aluminium trifluoride
● CAS No. 7784-18-1 ● EC No. 232-051-1
● AlF_3 ● FW 83.98

● Spec. density 2.88 g/cm³(20℃) ● Solub. in H_2O (20℃) almost insoluble ● Melting point 1291℃

● IMDG UN3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (ALUMINIUM FLUORIDE), 8, II ● HS Code 2826 12 00

Product No.	Packing	Price(₩)
643	500g	8,100

Aluminium Hydroxide — CP

수산화알루미늄
● CAS No. 21645-51-2 ● EC No. 244-492-7
● $Al(OH)_3$ ● FW 78.00

● Vapour pressure < 0.1 hPa (20℃) ● Spec. density 2.42 g/cm³(20℃) ● Solub. in H_2O 0.0015 g/l (20℃) (decomposition) ● pH value ~8-9 (100 g/l, H_2O, 20℃) (slurry) ● Melting point 300℃ (release of crystalline water) ● Bulk density ~600 kg/m³

● IMDG No Dangerous Good ● HS Code 2818 30 00
● Merck Index 10, 1588

Product No.	Packing	Price(₩)
645	500g	3,800

Aluminium Nitrate nonahydrate — Extra Pure

질산알루미늄
● CAS No. 7784-27-2 ● EC No. 236-751-8
● $Al(NO3)_3 \cdot 9H_2O$ ● FW 375.13

● Solub. in H_2O 419 g/l (20℃) ● pH value 2.0~4.0 (50 g/l, H_2O, 20℃) ● Melting point 74℃ ● Bulk density ~880 kg/m³

● IMDG UN1438 ALUMINIUM NITRATE, 5. 1, III ● HS Code 2834 29 00
● RTECS BD1050000 ● Merck Index 10, 1588

Appearance ····· White crystal or crystalline powder. Deliquescence.
Assay ····· Min 97.0%
Solubility in water ····· To pass test
pH (5%, 25℃) ····· 2.5~5.0
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.02%
Lead (Pb) ····· Max 0.005%
Iron (Fe) ····· Max 0.005%
Ammonium (NH_4) ····· Max 0.03%

Product No.	Packing	Price(₩)
647	500g	8,800
2868	20kg	231,300

Aluminium Oxide, activated, granule — CP

산화알루미늄 입상, Gooch crucibles
● CAS No. 1344-28-1 ● EC No. 215-691-6
● Al_2O_3 ● FW 101.96

● Spec. density 3.94 g/cm³(20℃) ● Solub. in H_2O (20℃) insoluble ● pH value ~7 (100 g/l, H_2O, 20℃) (slurry) ● Melting point 2053~2072℃ ● Bulk density ~90-190 kg/m³ ● Boiling point 2980℃

● IMDG UN1438 ALUMINIUM NITRATE, 5. 1, Ⅲ ● HS Code 2818 10 00
● RTECS BD1200000 ● Merck Index 10, 351

Product No.	Packing	Price(₩)
627	500g	4,000

Aluminium Oxide, powder — Extra Pure

Appearance ····· White ~ Gray crystals or crystalline powder.
Assay ····· Min 99.0%

Product No.	Packing	Price(₩)
5445	500g	4,400
5668	1kg	12,500

Aluminium, Powder — Extra Pure

알루미늄, 분말, Al
● CAS No. 7429-90-5 ● EC No. 231-072-3
● Al ● AW 26.981

● Spec. density 2.70 g/cm³(20℃) ● Solub. in H_2O (20℃) (reaction) ● Melting point 660℃ ● Boiling point 2327~2494℃ ● Ignition temp. ~400℃

● IMDG UN1396 ALUMINIUM POWDER, UN COATED, 4. 3, Ⅱ
● HS Code 7603 20 00
● RTECS BD1200000 ● Merck Index 10, 313

Appearance ····· Silvery powder, It dissolves in hydrochloric acid.
Silicon (Si) ····· Max 0.5%
Copper (Cu) ····· Max 0.05%
Iron (Fe) ····· Max 0.3%
Arsenic (As) ····· Max 2 ppm
Total Nitrogen (as N) ····· Max 0.008%

Product No.	Packing	Price(₩)
632	500g	13,800

Aluminium Sulfate, crystal 16~18water — Extra Pure

황산알루미늄
● CAS No. 7784-31-8, 10043-01-3(anh.) ● EC No. 233-135-0
● $Al_2(SO_4)_3 \cdot 16{\sim}18H_2O$ ● FW 342.14(anh.)

● Spec. density 1.72 g/cm3(20℃) ● Solub. in H_2O 364 g/l (20℃)l ● pH value 2.5~4.0 (20 g/l, H_2O, 20℃) ● Melting point ~90℃ (decomposition) ● Bulk density ~820 kg/m³ ● Decomposition point (anhydrous substance)

● IMDG No Dangerous Good ● HS Code 2833 22 00
● Merck Index 10, 364

Appearance ····· Colorless crystals or white crystalline, insoluble in ethanol.
Assay[$(Al_2(SO_4)_3$] ····· 51~57%
Solubility in water ····· To pass test
pH (5%) ····· Min 2.2
Extrication acid (H_2SO_4) ····· Max 0.3%
Chloride (Cl) ····· Max 0.005%
Heavy metals (as Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.005%
Alkaline & other alkaline earths (as Sulfate) ····· Max 0.5%
Arsenic (As) ····· Max 5 ppm

Product No.	Packing	Price(₩)
666	500g	4,400

Aluminum silicate hydrated → *go to Kaoline*

Aluminum trifluoride → *go to Aluminium Fluoride*

Aluminium Tristearate — Extra Pure

트리스테아린산 알루미늄
● CAS No. 637-12-7
● $Al(C_{17}H_{35}COO)_3$ ● FW 877.39

Appearance ····· Fine white powder, Unusual odor or smells a little.
Assay(after dried,as Al) ····· 3.5 ~ 6.0%
Loss on drying(at 105℃, 3hr.) ····· Max 2.0%
Water soluble matter ····· Max 0.1%
Alkali metal and Alkali metal earths ····· Max 2%
Heavy metals (as Pb) ····· Max 0.002%

Product No.	Packing	Price(₩)
3414	400g	16,300

Amberlite IR-120 — Extra Pure

Product No.	Packing	Price(₩)
671	1ℓ	8,800

Amberlite IRA-410 — Extra Pure

Product No.	Packing	Price(₩)
672	1ℓ	16,300

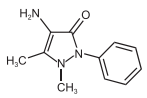
Amidosulfonic acid ammonium salt
→ *go to Ammonium sulfamate*

Amidosulfuric acid → *go to Sulfamic Acid*

Aminoacetic acid → *go to Glycine*

4-Aminoantipyrine — GR / AR / ACS

NEW



Ampyrone
● CAS No. 83-07-8 ● EC No. 201-452-3
● $C_{11}H_{13}N_3O$ ● FW 203.24

● pH value 7.1 (100 g/l, H2O, 20 ℃) (slurry) ● Solub.in H_2O 56 g/l (20 ℃) ● Melting point 107 – 109 ℃ ● Bulk density ~ 430 kg/m³

● IMDG NO Dangerous Good ● HS Code 2933 11 90

Appearance ····· Brownish yellow powder.
Assay ····· Min 99.0%
Melting point ····· 107 ~ 110℃
Solubility in water ····· To pass test
Solubility in Ethanol ····· To pass test
Solubility in phenol ····· To pass test
Sensitivity to as Reagent tof Phenol ····· To pass test
Residue after ignition ····· Max 0.1%
Loss on drying ····· Max 0.5%

Product No.	Packing	Price(₩)
4681	25g	60,000

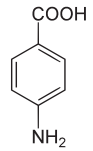
Aminobenzene → *go to Aniline*

4-Aminobenzenesulfonamide → *go to Sulfanilamide 98%*

4-Aminobenzenesulfonic acid → *go to Sulfanilic Acid*

NEW

4-Aminobenzoic acid — Extra Pure



4-아미노벤조산, p-Aminobenzoic acid
- CAS No. 150-13-0 • EC No. 205-753-0
- $C_7H_7NO_2$ • FW 137.14

- Spec. density 1.38 g/cm³ (20℃) • Solub.in H_2O 4.7g/l (20℃) • Melting point 186 – 189 ℃ • pH value 3.5 (5 g/l, H_2O, 20 ℃) • Bulk density ~300 kg/m³

- IMDG NO Dangerous Good • HS Code 2922 49 95

Product No.	Packing	Price(₩)
5107	500g	32,500

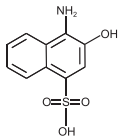
p-Aminobenzoic acid → *go to 4-Aminobenzoic acid*

Aminocyclohexane → *go to Cyclohexylamine*

2-Aminoethanol → *go to Monoethanolamine*

NEW

1-Amino-2-naphthol-4-sulfonic acid — GR / ACS



4-Amino-3-hydroxy-1-naphthalenesulfonic acid
- CAS No. 116-63-2 • EC No. 204-147-3
- $H_2NC_{10}H_5(OH)SO_3H$ • FW 239.25

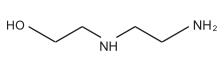
- Solub.in H_2O (20℃) practically insoluble
- Bulk density ~280 kg/m³

- IMDG NO Dangerous Good • HS Code 2922 21 00

Appearance ····· Pale violet coloured powder.
Assay ····· Min 98.0%
Solubility in sodium carbonate ····· To pass test
Melting point ····· 285℃
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.5%
Sensitivity to phosphate ····· To pass test
Sensitivity ····· To pass test

Product No.	Packing	Price(₩)
4679	25g	15,500

N-(2-Aminoethyl) Ethanolamine — Extra Pure



아미노에틸렌에탄올라민, 2-(2-Aminoethylamino)ethanol, Aminoethyl Ethanolamine
- CAS No. 111-41-1 • EC No. 203-867-5
- $H_2NCH_2CH_2NHCH_2CH_2OH$ • FW 104.15

- Vapour pressure <0.012hPa (20℃) • Spec. density 1.03 g/cm³ (20℃) • Explosive limit 3.3 ~ 10.1%(V) • Flash point 144℃ • Solub. in H_2O soluble • pH value 11.8 (111 g/ℓ, H_2O, 20℃) • Melting point –28 ℃ • Boiling point 237~24℃

- IMDG UN2735 AMINES, LIQUID, CORROSIVE, N.O.S. (2-(2-AMINOETHYLAMINO)ETHANOL), 8, II • HS Code 2922 19 85
- RTECS KJ6300000 • 4류 3석유류 (수용성 액체) 4000ℓ

Appearance ····· Colorless yellow ,Clear liquid.
Assay (by GC) ····· Min 99.0%
Specific gravity (20℃) ····· 1.020 ~ 1.035
Refractive index (20℃) ····· 1.482 ~ 1.488

Product No.	Packing	Price(₩)
694	500g	16,300

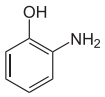
L-α-Aminoglutaric acid → *go to L-Glutamic Acid*

4-Amino-3-hydroxy-1-naphthalenesulfonic acid
→ *go to 1-Amino-2-naphthol-4-sulfonic acid*

2-Amino-2-methylpropane → *go to tert-Butyl Amine*

2-Aminophenol — Extra Pure

NEW



2-아미노페놀, o-Hydroxyaniline, 2-Amino-1-hydroxy benzene
- CAS No. 95-55-6 • EC No. 202-431-1
- C_6H_7NO • FW 109.13

- Vapour pressure 14 hPa (153℃) • Spec. density 1.328 g/cm³ (20℃) • Flash point 〉175 ℃c.c. • Solub.in H_2O 17 g/l (20℃) • Melting point 172 – 174 ℃ (sublimed) • Boiling point ~ 150 ℃ (15 hPa) • Ignition temp. 190 ℃ • Bulk density ~ 600 kg/m³

- IMDG UN 2512 AMINOPHENOLS, 6.1, III • HS Code 2922 29 00
- Merck Index 10, 465

Product No.	Packing	Price(₩)
5108	25g	45,000

α-Amino-β-phenyl propionic acid → *go to L - Phenylalanine*

DL-2-Aminopropanoic acid → *go to DL-Alanine*

Ammonia Water 28%

암모니아수, Ammonium Hydroxide solution
- CAS No. 1336-21-6 • EC No. 215-647-6
- NA_4OH • FW 35.04

- Vapour pressure 483 hPa (20℃) • Spec. density 0.91 g/cm³(20℃) • Explosive limit 15.4~33.6 Vol% • Solub. in H_2O (20℃) Soluble • pH value (20℃)strongly alkaline • Melting point –57.5℃ • Boiling point 37.7℃

- IMDG UN2672 AMMONIA SOLUTION, 8, III • HS Code 2814 20 00
- Merck Index 10, 503

Ammonia Water 28% — Extra Pure

Appearance ····· Clear,Colorless liquid,having a very pungent, characteristic odor
Assay ····· 25.0~30.0%
Ignition residue ····· Max 0.005%
Carbonate (CO_3) ····· Max 0.01%
Chloride (Cl) ····· Max 5 ppm
Sulfur Compounds (as S) ····· Max 0.002%
Lead (Pb) ····· Max 5 ppm
Iron (Fe)Assay ····· Max 3 ppm
Substances reducing permanganateAssay ····· To pass test

Product No.	Packing	Price(₩)
700	500㎖	3,100
701	1ℓ	4,400
703	18ℓ	30,000

Ammonia Water 28% — GR

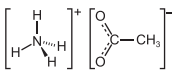
Product No.	Packing	Price(₩)
4919	2.5ℓ	8,500

Ammonia Water 28% EL

Assay (as NH_3)	28.0 ~ 30.0%
Color(APHA)	Max 10
Residue after evaporation	Max 3ppm
Chloride (Cl)	Max 0.5 ppm
Phosphate (PO_4)	Max 0.4 ppm
Sulfate (as SO_4)	Max 1 ppm
Aluminum (Al)	Max 10 0ppb
Arsenic (As)	Max 5 0ppb
Barium (Ba)	Max 100 ppb
Boron (B)	Max 20 ppb
Cadmium (Cd)	Max 100 ppb
Calcium (Ca)	Max 100 ppb
Chromium (Cr)	Max 100 ppb
Cobalt (Co)	Max 100 ppb
Copper (Cu)	Max 10 ppb
Gallium (Ga)	Max 50 ppb
Germanium (Ge)	Max 100 ppb
Gold (Au)	Max 100 ppb
Iron (Fe)	Max 50 ppb
Lead (Pb)	Max 100 ppb
Lithium (Li)	Max 100 ppb
Magnesium (Mg)	Max 100 ppb
Manganese (Mn)	Max 100 ppb
Nickel (Ni)	Max 100 ppb
Potassium (K)	Max 100 ppb
Silicon (Si)	Max 100 ppb
Silver (Ag)	Max 100 ppb
Sodium (Na)	Max 100 ppb
Tin(Sn)	Max 100 ppb
Strontium(Sr)	Max 100 ppb
Zinc (Zn)	Max 100 ppb

Product No.	Packing	Price(₩)
707	3.8 ℓ	41,300
1713	180kg	Call

Ammonium Acetate Extra Pure



아세트산암모늄
- CAS No. 631-61-8 • EC No. 211-162-9
- CH_3COONH_4 • FW 77.08

- Spec. density 1.17 g/cm³(20℃) • Solub. in H_2O 1480 g/l (4℃) • pH value 6.7~7.3 (50 g/l, H_2O, 25℃)
- Melting point 114℃ • Bulk density ~410 kg/cm³

- IMDG No Dangerous Good • HS Code 2915 29 00
- RETCS AF3645000 • Merck Index 10, 504

Appearance	White is the decision of the Deliquescence.
Assay	Min 95.0%
Solubility in water	To pass test
Ignition residue (as Sulfate)	Max 0.05%
Chloride (Cl)	Max 0.005%
Sulfate (SO_4)	Max 0.003%
Heavy metals (as Pb)	Max 0.002%
Iron (Fe)	Max 0.002%

Product No.	Packing	Price(₩)
710	500g	8,800
1766	1kg	13,800
712	20kg	125,000

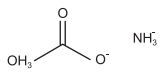
Ammonium Adipate Extra Pure

아디픽산암모늄, Diammoinum adipate
- CAS No. 3385-41-9
- $NH_4OCO(CH_2)_4COONH_4$ • FW 180.20

Solubility in water	To pass test
Chloride (Cl)	Max 0.0003%
Sulfate (SO_4)	Max 0.0005%
Heavy metals (as Pb)	Max 0.0005%
Iron (Fe)	Max 0.0001%
pH (M/5 Sol.)	Max 7.3
Assay	Max 100.0%

Product No.	Packing	Price(₩)
714	500g	11,400

Ammonium Bicarbonate



중탄산암모늄, Ammonium Hydrogen Carbonate
- CAS No. 1066-33-7 • EC No. 213-911-5
- NH_4HCO_3 • FW 79.06

- Vapour pressure 67 hPa (20℃) • Spec. density 1.586 g/cm³ • Solub. in H_2O 220g/l (20℃) • pH value ~8 (50 g/l, H_2O, 20℃) • Melting point 106℃(closed capillary tube) • Bulk density ~600kg/m³

- IMDG No Dangerous Good • HS Code 2836 99 00
- RETCS BO8600000 • Merck Index 10, 507

Ammonium Bicarbonate Extra Pure

Appearance	Chunks of white or translucent, Crystals or crystalline powder,Strong smell of ammonia white crystal powder
Assay	Min 95.0%
Solubility in water	To pass test
Ignition residue (as Sulfate)	Max 0.01%
Chloride (Cl)	Max 0.003%
Sulfate compounds (as SO_4)	Max 0.005%
Heavy metals (as Pb)	Max 0.001%
Iron (Fe)	Max 0.001%

Product No.	Packing	Price(₩)
721	500g	4,400

Ammonium Bicarbonate CP

Product No.	Packing	Price(₩)
3925	25kg	112,500

Ammonium Bichromate → *go to Ammonium Dichromate*

Ammonium Bifluoride Extra Pure

바이플루오르화암모늄, 불화수소암모늄, Ammonium Hydrogen fluoride
- CAS No. 1341-49-7 • EC No 215-676-4
- $NH_4F \cdot HF$ • FW 57.04

- Vapour pressure 1hPa (20℃) • Spec. density 1.5 g/cm³(20℃) • Solub. in H_2O 630 g/l (20℃) • pH value 2 (5.7 g/l, H2O, 20℃) • Melting point 126℃ • Bulk density 750 kg/cm³ • Boiling point230℃ (decomposition)

- IMDG UN1727 AMMONIUM HYDROGENDIFLUORIDE, SOLID, 8, II, Segregation
- HS Code 2826 19 10

Appearance	white crystal powder.
Assay (after dried)	Min 95.0%
Ignition residue (as Sulfate)	Max 0.06%
Chloride (Cl)	Max 0.02%
Sulfate (SO_4)	Max 0.05%
Ammonium Silicofluoride	Max 2.0%
Heavy Metals (as Pb)	Max 0.01%
Iron(Fe)	Max 0.005%

Product No.	Packing	Price(₩)
723	500g	8,800
1800	1kg	13,800

Ammonium biphosphate → *go to Ammonium Phosphate dibasic*

Ammonium Bromide GR

브롬화암모늄

● CAS No. 12124-97-9 ● EC No. 235-183-8
● NH_4Br ● FW 97.94

● Vapour pressure 1.3 hPa (198℃) ● Spec. density 2.43 g/cm³(20℃) ● Solub. in H_2O 742 g/l (20℃) ● pH value 4.8 (50 g/l, H_2O, 25℃) ● Melting point 542℃(closed capillary tube) ● Bulk density ~1100 kg/cm³

● IMDG No Dangerous Good ● HS Code 2827 59 00
● Merck Index 10, 516

Appearance ····· White crystalline powder, slightly hygroscopic.
Assay ····· 98.0~100.3%
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.01%
pH (5%, 25℃) ····· 4.5~6.5
Chloride (Cl) ····· Max 0.2%
Sulfate (SO_4) ····· Max 0.005%
Iodide ····· To pass test
Bromate ····· To pass test
Heavy Metals (as Pb) ····· Max 4 ppm
Iron(Fe) ····· Max 3 ppm
Calcium & other alkaline earths (as Ca) ····· To pass test

Product No.	Packing	Price(₩)
725	500g	9,400

Ammonium Carbonate Extra Pure

탄산암모늄

● CAS No. 506-87-6
● $(NH_4)_2CO_3$ ● FW 96.09

● Solub. in H_2O Soluble (decomposes in hot water) ● Melting point 58℃

Appearance ····· Colorless ~ white crystalline, Ammonia oder.
Assay (as NH_3) ····· 20~37.5%
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.02%
Chloride (Cl) ····· Max 0.005%
Sulfate compounds (as SO_4) ····· Max 0.005%
Lead (Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
726	500g	7,000
3608	1kg	11,400
1767	25kg	Call

NEW

Ammonium Ceric Sulfate Extra Pure

Cerium(IV) ammonium sulfate
● CAS No. 10378-47-9 ● EC No. 231-567-4
● $(NH_4)_4Ce(SO_4)_4 \cdot 2H_2O$ ● FW 632.55

● Solub. in H_2O(20℃) Hydrolysis ● pH value ~1.2 (100 g/ℓ, H_2O, 20℃) ● Bulk density ~800kg/m³

● IMDG NO Dangerous Good ● HS Code 2846 10 00

Appearance ····· Yellowish orange crystalline powder.
Assay ····· Min 98.0%
Chloride (Cl) ····· Max 0.001%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
4924	25g	16,300

Ammonium Cerium(IV) Sulfate dihydrate
→ *go to Ammonium Ceric Sulfate*

Ammonium Chloride Extra Pure

염화암모늄

● CAS No. 12125-02-9 ● EC No. 235-186-4
● NH_4Cl ● FW 53.49

● Vapour pressure 1.3 hPa (30℃) ● Spec. density 1.52 g/cm³(20℃) ● Solub. in H_2O 372 g/l (20℃) ● pH value 4.5~5.5 (50 g/l, H_2O, 20℃) ● Melting point 335℃(sub-limed) ● Bulk density ~500 kg/cm³ ● Ignition temp. > 400℃

● IMDG No Dangerous Good ● HS Code 2827 10 00
● RTECS BP4550000 ● Merck Index 10, 522

Appearance ····· White crystalline powder or lump
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.05%
pH (5%, 25℃) ····· 4.5~6.0
Nitrate ····· To pass test
Phosphate (PO_4) ····· Max 5 ppm
Sulfate (SO_4) ····· Max 0.002%
Lead (Pb) ····· Max 10 ppm
Iron(Fe) ····· Max 5 ppm

Product No.	Packing	Price(₩)
731	500g	5,000
4092	1kg	8,800
732	20kg	93,800

Ammonium Citrate, dibasic Extra Pure

시트르산암모늄, Diammonium Hydrogen Citrate
● CAS No. 3012-65-5
● $HOC(COOH)(CH_2COONH_4)_2$ ● FW 226.19

Appearance (APHA) ····· Colorless crystals or crystalline powder.
Assay ····· 97.0~103.0%
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.1%
pH (5% Sol.) ····· 4.7~5.6
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.02%
Phosphate (PO_4) ····· Max 0.002%
Lead (Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
739	500g	10,000
740	15kg	212,500

A

Ammonium Dichromate — Extra Pure

중크롬산암모늄
● CAS No. 7789-09-5
● $(NH_4)_2Cr_2O_7$ ● FW 252.07

Appearance ····· Orange-red colored crystal.
Assay ····· Min 98.5%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.015%
Sulfate (SO_4) ····· Max 0.04%
Calcium (Ca) ····· Max 0.07%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
744	500g	22,500
745	20kg	381,500

Ammonium dihydrogen Phosphate
→ *go to Ammonium Phosphate monobasic*

Ammonium Fluoride — CP

플루오르화암모늄, Fluoroammonium
● CAS No. 12125-01-8 ● EC No. 235-185-9
● NH_4F ● FW 37.04

● Spec. density ~1.01 g/cm³(20℃) ● Solub. in H_2O 820 g/l (20℃) ● pH value ~6 (50 g/l, H_2O, 20℃) ● Bulk density ~250-350 kg/cm³

● IMDG UN 2505 AMMONIUM FLUORIDE, 6, 1, Ⅲ ● HS Code 2826 19 00
● Merck Index 10, 538

Appearance ····· white crystal
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.01%

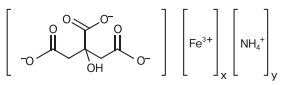
Product No.	Packing	Price(₩)
749	500g	16,300

Ammonium hydrogen carbonate → *go to Ammonium Bicarbonate*

Ammonium hydrogen Fluoride → *go to Ammonia bifluoride*

Ammonium hydroxide solution → *go to Ammonia Water 28%*

Ammonium Iron(Ⅲ) Citrate, brown — Extra Pure



구연산제이철암모늄, Iron(Ⅲ) Ammonium Citrate, Ferric Ammonium Citrat
● CAS No. 1185-57-5
● EC No. 214-686-6
● C_6H_{5+4y}*Fex*N_yO_7

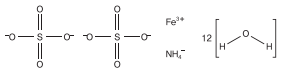
● Solub. in H_2O 1200 g/ℓ (20℃) ● pH value, 6~8 (100 g/ℓ, H_2O, 20℃)

● IMDG No Dangerous Good ● HS Code 2918 15 00
● RTECS GE7540000

Appearance ····· Reddish brown crystalline powder.
Assay (as Fe) ····· 20.5 ~ 22.5%
Chloride (Cl) ····· Max 0.05%
Sulfate (SO_4) ····· Max 0.2%
Heavy metals (as Pb) ····· Max. 0.002%
Arsenic (As) ····· Max 0.0004%
Zinc (Zn) ····· Max 0.005%
Free ferric compounds ····· To pass test

Product No.	Packing	Price(₩)
4016	25g	5,500
4017	500g	30,000

Ammonium Iron(Ⅲ) Sulfate dodecahydrate — Extra Pure



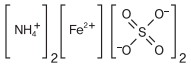
황산제이철암모늄 12수화물, Iron(III) Ammonium Sulfate, Ferric Ammonium Sulfate, Iron alum
● CAS No. 7783-83-7
● EC No. 33-382-4
● $(NH_4)Fe(SO_4)_2$ * $12H_2O$ ● FW 482.193

● Solub. in H_2O 1240 g/ℓ (25℃) ● pH value, 1.8 (100 g/ℓ, H2O, 20℃) ● Melting point 39~41℃ ● Bulk density 750 kg/cm³

● IMDG No Dangerous Good ● HS Code 2833 30 00

Product No.	Packing	Price(₩)
4019	500g	9,400
4018	1kg	16,300

Ammonium Iron(II) Sulfate hexahydrate — Extra Pure — NEW



황산제일철암모늄 6수화물, Iron(II) Ammonium Sulfate, Ferrous Ammonium Sulphate, Mohr's salt
● CAS No. 7783-85-9 ● EC No. 233-151-8
● $C(NH_4)_2Fe(SO_4)_2$ * $6H_2O$ ● FW 392.13

● Spec. density 1.86 g/cm³(20℃) ● Solub. in H_2O 269 g/ℓ(20℃) ● pH value, 3~5 (50 g/ℓ, H_2O, 20℃) ● Melting point 100℃ (decomposition) ● Bulk density ~900 kg/cm³

● IMDG No Dangerous Good ● HS Code 2842 90 80
● RTECS BR6500000

Appearance ····· Green blue crystals or crystalline powder.
Assay ····· Min 99.0%
Solubility in dil. HCl ····· Clear
pH (5%) ····· 3.0~5.0
Chloride (Cl) ····· Max 0.01%
Sodium (Na) ····· Max 0.01%
Potassium (K) ····· Max 0.01%
Copper (Cu) ····· Max 0.001%
Magnesium (Mg) ····· Max 0.01%
Calcium (Ca) ····· Max 0.01%
Zinc (Zn) ····· Max 0.003%
Lead(Pb) ····· Max 0.002%

Product No.	Packing	Price(₩)
4020	500g	94,000
3956	1kg	16,300

Ammonium Metavanadate — GR / AR / ACS

● CAS No. 7803-55-6
● NH_4VO_3 ● FW 116.98

Product No.	Packing	Price(₩)
4608	500g	56,300

Ammonium Molybdate, tetrahydrate

몰리브덴산암모늄
- CAS No. 12054-85-2
- $(NH_4)_6Mo7O_{24} \cdot 4H_2O$ • FW 1235.86

Ammonium Molybdate, tetrahydrate — Extra Pure

Appearance	White crystal or crystalline powder.
Assay(as MoO_3)	Min 81.%
Solubility in water	To pass test
Chloride (Cl)	Max 0.003%
Sulfate (SO_4)	Max 0.02%
Nitrate	To pass test
Phosphate (PO_4)	Max 5 ppm

Product No.	Packing	Price(₩)
761	500g	82,500

Ammonium Molybdate, tetrahydrate — GR

Appearance	White crystal or crystalline powder.
Assay(as MoO_3)	Min 99.0%
Solubility in water	To pass test
Solubility in Nitric-Ammonium nitric Sol.	To pass test
Chloride (Cl)	Max 0.001%
Nitrate	To pass test
Phosphate (PO_4)	Max 0.0005%
Silicate (SiO_2)	Max 0.005%
Sulfate (SO_4)	Max 0.01%
Copper (Cu)	Max 0.001%
Lead (Pb)	Max 0.001%
Iron (Fe)	Max 0.002%

Product No.	Packing	Price(₩)
760	25g	8,800

Ammonium Nickel (II) Sulfate, hexahydrate — Extra Pure

황산니켈암모늄
- CAS No. 15699-18-0
- $(NH_4)_2Ni(SO_4)_2 \cdot 6H_2O$ • FW 394.98

Appearance	Green crystal or crystalline powder.
Assay	Min 98.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.003%
Copper (Cu)	Max 0.005%
Lead (Pb)	Max 0.005%
Iron (Fe)	Max 0.005%
Cobalt (Co)	Max 0.2%

Product No.	Packing	Price(₩)
764	500g	18,800

Ammonium Nitrate — Extra Pure

질산암모늄, Nitric aicd ammonia, ammonia nitrate
- CAS No. 6484-52-2 • EC No. 229-347-8
- NH_4NO_3 • FW 80.04

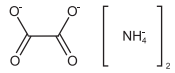
- Spec. density 1.72 g/cm³(20℃) • Solub. in H_2O 1920 g/l (20℃) • pH value 4.5~7.0 (100 g/l, H_2O, 20℃) • Melting point 169℃ • Bulk density ~600-700 kg/cm³ • Boiling point 210℃ decommposes

- IMDG UN 1942AMMONIUM NITRATE, 5. 1, Ⅲ • HS Code 3102 30 00
- 1류 질산염류 300kg • Merck Index 10, 552

Appearance	Colorless crystals or white crystalline powder.
Assay	Min 98.0%
Solubility in water	To pass test
Ignition residue (as Sulfate)	Max 0.02 %
pH (5w/v%, 25℃)	4.5~6.0
Chloride (Cl)	Max 0.001%
Sulfate (SO_4)	Max 0.005%
Phosphate (PO_4)	Max 5 ppm
Lead (Pb)	Max 0.001%
Iron(Fe)	Max 4 ppm

Product No.	Packing	Price(₩)
765	500g	5,600
766	25kg	110,300

Ammonium Oxalate, monohydrate — Extra Pure



옥살산암모늄, Oxalic acid ammonium salt
- CAS No. 6009-70-7 • EC No. 214-202-3
- $H_4NOCOCOONH_4 \cdot H_2O$ • FW 142.11

- Vapour pressure (20℃) low • Spec. density ~1.50 g/cm³ (20℃) • Solub. in H_2O 45 g/l (20℃) (anhydrous substance) • pH value ~6.4 (14 g/l, H_2O) • Melting point 70℃(decompositin) • Bulk density ~480 kg/cm³

- IMDG No Dangerous Good • HS Code 2917 11 00
- Merck Index 10, 556

Product No.	Packing	Price(₩)
5312	500g	14,500

Ammonium peroxodisulfate → *go to Ammonium Persulfate*

Ammonium Persulfate — Extra Pure

과황산암모늄, Ammonium Peroxodisulfate, Peroxidisulfuric acid diammonium salt
- CAS No. 7727-54-0 • EC No. 231-786-5
- $(NH_4)_2S_2O_8$ • FW 228.19

- Spec. density 1.98 g/cm³(20℃) • Solub. in H_2O 620 g/l (20℃) • pH value 3.2 (100 g/l, H_2O, 20℃) • Melting point 120℃ (decomposition) • Bulk density ~900 kg/cm³

- IMDG UN 1444AMMONIUM PERSULFATE, 5, 1, Ⅲ • HS Code 2833 40 00
- RTECS SE0350000 • 1류 퍼옥소이황산염류 300kg • Merck Index 10, 560

Appearance	Colorless ~ pale yellow powder or crystalline powder.
Assay	Min 98.0%
Solubility in water	To pass test
Ignition residue (as Sulfate)	Max 0.2%
Chloride (Cl)	Max 0.005%
Lead (Pb)	Max 0.01%
Manganese (Mn)	Max 1 ppm
Iron (Fe)	Max 0.005%

Product No.	Packing	Price(₩)
769	500g	5,600
770	25kg	110,000

A

Ammonium Phosphate, dibasic — Extra Pure

제2인산암모늄, Ammonium biphosphate, Diammonium hydrogen phoshate, Fyrex
● CAS No. 7783-28-0 ● EC No. 231-987-8
● $(NH_4)_2HPO_4$ ● FW 132.06

● Spec. density 1.619 g/cm³(20℃) ● Solub. in H_2O 690 g/l (20℃) ● pH value 7.6~8.2 (100 g/l, H_2O, 20℃) ● Bulk density ~800-1000 kg/cm³

● IMDG No Dangerous Good ● HS Code 3105 30 00

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 98.5%
Solubility in water ····· To pass test
pH (5w/v%, 25℃) ····· 7.8~8.3
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.002%
Arsenic (As) ····· Max 3 ppm
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
776	500g	6,100
778	25kg	140,600

Ammonium Phosphate, monobasic — Extra Pure

제1인산암모늄, Ammonium Dihydrogen Phosphate, Ammonium biphosphate, Ammonium phosphate monobasic, Primary ammonium phosphate, Monoammonium orthophosphate
● CAS No. 7722-76-1 ● EC No. 231-764-5
● $NH_4H_2PO_4$ ● FW 115.03

● Vapour pressure 0.066 hPa (125℃) ● Spec. density 1.80 g/cm³ (20℃) ● Solub. in H_2O 368 g/l (20℃) ● pH value 3.8~4.4 (50 g/l, H_2O, 20℃) ● Melting point 190℃ ● Bulk density ~800-1100 kg/cm³

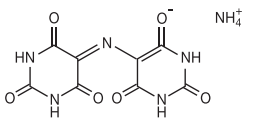
● IMDG No Dangerous Good ● HS Code 3105 40 00
● Merck Index 10, 562

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
pH (5w/v%, 25℃) ····· 4.0~4.5
Chloride (Cl) ····· Max 0.005%
Nitrate (NO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.02%
Heavy metals (as Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.003%
Arsenic (As) ····· Max 3 ppm

Product No.	Packing	Price(₩)
747	500g	5,600
1771	30kg	168,800

NEW

Ammonium Purpurate (C.I.No.56085) — Extra Pure



Murexide
● CAS No. 3051-09-0 ● EC No. 221-266-6
● $C_8H_8N_6O_6$ ● FW 284.19

● Solub. in H_2O 1g/l (20℃) ● pH value ~5 (1 g/ℓ, H_2O, 20℃) ● Bulk density ~330kg/m³

● IMDG NO Dangerous Good ● HS Code 2933 54 00

Product No.	Packing	Price(₩)
5109	25g	120,000

Ammonium Sulfamate — Extra Pure

설파믹산암모늄, Amidosulfonic acid ammonium salt, Sulfamic acid ammomnium salt
● CAS No. 7773-06-0 ● EC No. 231-871-7
● $NH_4OSO_2NH_2$ ● FW 114.12

● Solub. in H_2O 1950 g/l (20℃) (chief component) ● pH value 5.0~6.0 (50 g/l, H_2O, 20℃) ● Boiling point 160℃ (1013 hPa) decomposes

● IMDG No Dangerous Good ● HS Code 2842 90 00

Appearance ····· colorless crystals or crystalline powder is hygroscopic.
Assay ····· Min 97.0%
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.1%
pH (5w/v%, 25℃) ····· 4.7~5.7
Chloride (Cl) ····· Max 0.002%
Sulfate (SO_4) ····· Max 0.1%

Product No.	Packing	Price(₩)
1772	500g	6,300

Ammonium Sulfate — Extra Pure

황산암모늄
● CAS No. 7783-20-2 ● EC No. 231-984-1
● $(NH_4)_2SO_4$ ● FW 132.14

● Spec. density 1.77 g/cm³ (20℃) ● Solub. in H_2O 754 g/l (20℃) (chief component) ● pH value ~5~6 (50 g/l, H_2O, 20℃) ● Bulk density ~960 kg/cm³

● IMDG No Dangerous Good ● HS Code 3102 21 00
● RTECS BS4500000 ● Merck Index 10, 575

Appearance ····· Colorless crystals or chunks.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.03 ppm
pH (5w/v%, 25℃) ····· 4.5~6.0
Chloride (Cl) ····· Max 0.005%
Phosphate (PO_4) ····· Max 0.001%
Lead (Pb) ····· Max 0.002%
Arsenic (As) ····· Max 2 ppm
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
788	500g	4,000
790	1kg	7,400
792	25kg	75,000

Ammonium sulfocyanide → *go to Ammonium Thiocyanate*

NEW

Ammonium (+)-Tartrate — GR / AR

Diammonium (+)-Tartrate
● CAS No. 3164-29-2
● $[CH(OH)COONH_4]_2$ ● FW 184.15

Appearance ····· White crystalline powder.
Assay ····· Min 99.0%
Insoluble matter ····· Max 0.005%
Chloride (Cl) ····· Max 0.0005%
Sulfate (SO_4) ····· Max 0.0001%
Iron (Fe) ····· Max 0.001%
Lead (Pb) ····· Max 0.0005%

Product No.	Packing	Price(₩)
4782	500g	24,000

Ammonium Thiocyanate — Extra Pure

싸이오사이안산암모늄, Ammonium sulfocyanide, Ammonium rhodanide, Thiocyanin acid ammonium salt, Ammonium sulfocynate

- CAS No. 1762-95-4 • EC No. 217-175-6
- NH_4SCN • FW 76.12

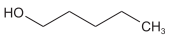
- Vapour pressure < 1 hPa (20℃) • Spec. density 1.3 g/cm³ (20℃) • Solub. in H_2O 1600 g/l (20℃) • pH value 4.8~5.8 (50 g/l, H_2O, 20℃) • Melting point ~150℃ • Boiling point 170℃ (decomposition) • Bulk density 600~700 kg/cm³

- IMDG No Dangerous Good • HS Code 2842 90 00
- RTECS XK7875000 • Merck Index 10, 582

Appearance ····· colorless crystals,deliquescence
Assay (after dried) ····· Min 99.5%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Loss on drying (at H_2SO_4Desiccator, 24hr.) ····· Max 2.0%
Ignition residue (as Sulfate) ····· Max 0.1%
Chloride (Cl) ····· Max 0.015%
Sulfate (SO_4) ····· Max 0.01%
Iron(Fe) ····· Max 3 ppm

Product No.	Packing	Price(₩)
783	500g	12,000

n-Amyl Alcohol — Extra Pure



노말-아밀알콜, 1-Pentanol, Pentyl alcohol, n-Butyl carbinol

- CAS No. 71-41-0 • EC No. 200-752-1
- $CH_3(CH_2)_4OH$ • FW 88.15

- Vapour pressure 2.6 hPa (20℃) • Spec. density 0.815 g/cm³ (20℃) • Explosive limit 1.6~8.0 Vol% • Flash point 49℃ (DIN51755) • Solub. in H_2O 22 g/l (20℃) • pH value (22 g/l, H_2O, 20℃) • Saturation conc. 11 g/m³ (20℃) • Melting point -78℃ • Boiling point 138℃ (1013 hPa) • Ignition temp. 300℃ (DIN51794)

- IMDG UN 1105 PENTANOLS, 3, Ⅲ • HS Code 2905 19 00
- RTECS SB9800000 • Merck Index 10, 6985

Appearance ····· Clear-colorless liquid, Unusual odor.
Density (20℃) ····· 0.810~0.820 g/ml
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.005%
Acidity (as CH_3COOH) ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
796	1ℓ	23,800

Aniline — Extra Pure

아닐린, Aminobenzene, Phenylamine

- CAS No. 62-53-3 • EC No. 200-539-3
- $C_6H_5NH_2$ • FW 93.13

- Vapour pressure 0.5 hPa (20℃) • Spec. density 0.815 g/cm³ (20℃) • Explosive limit 1.2~11 Vol% • Flash point 70℃ (DIN51758) • Solub. in H_2O 36 g/l (20℃) • pH value ~8.8 (36 g/l, H_2O, 20℃) • Saturation conc. 2 g/m³ (20℃) • Melting point -6.2℃ • Boiling point 184℃ (1013 hPa) • Water absorption 540 g/kg (30℃) • Ignition temp. 540℃ (DIN51794)

- IMDG UN1547 ANILINE, 6. 1, Ⅱ • HS Code 2921 41 00
- 4류 제3석유류(비수용성액체) 2000ℓ • Merck Index 10, 681

Appearance ····· colorless liquid with a characteristic odor.
Assay ····· Min 99.0%
Density (20℃) ····· 1.019~1.023 g/ml
Residue after evaporation ····· Max 0.01%
Nitrobenzene ($C_6H_5NO_2$) ····· To pass test

Product No.	Packing	Price(₩)
801	500g	5,600

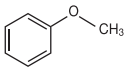
Aniline Blue,water soluble — Indicator

아닐린블루, 수용성

- CAS No. 28631-66-5
- $C_{32}H_{25}N_3Na_2O_9S_3$ • FW 737.72

Product No.	Packing	Price(₩)
806	25g	16,000

Anisole — GR NEW



아니솔, Methoxybenzene

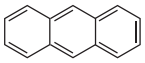
- CAS No. 100-66-3 • EC No. 202-876-1
- C_7H_8O • FW 108.13

- Vapour pressure 3.2 hPa (20℃) • Spec. density 0.99 g/cm³(25℃) • Explosive limits 0.34~6.3 vol% • Flash point 44℃ c.c. • Solub. in H_2O 1.6 g/l (25℃) • Saturation conc. 6 g/m³ (20℃) • Melting point -37℃ • Bulk density ~500kg/m³ • Boiling point 156 ℃(1013 hPa) • Ignition temp. 475 ℃

- IMDG UN 2222 ANISOLE, 3, Ⅲ • HS Code 2909 30 90
- RTECS BZ8050000 • 제4류 2석유류(비수용성 액체), 1000ℓ

Product No.	Packing	Price(₩)
5110	1ℓ	23,500

Anthracene — Extra Pure NEW



안트라퀴논, Paranaphthalene

- CAS No. 120-12-7 • EC No. 204-371-1
- $C_{14}H_{10}$ • FW 178.23

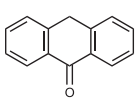
- Explosive limits 0.6 vol% • Flash point 121℃ c.c. • Solub. in H_2O 0.0001 g/l (20℃) • Melting point 215-217 ℃ • Bulk density ~330kg/m³ • Ignition temp. 540℃

- IMDG NO Dangerous Good • HS Code 2902 90 90
- RTECS CA9350000 • Merck Index 10, 704

Product No.	Packing	Price(₩)
5111	25g	16,300

A

Anthrone — Extra Pure



9,10-Dihydro-9-oxoanthracene
● CAS No. 90-44-8 ● EC No. 201-994-0
● $C_{14}H_{10}O$ ● FW 194.23

● Solub. in H_2O 4.6 g/l (20℃) ● Melting point 151-156 ℃ ● Bulk density 450kg/m³ ● Boiling point 77.3℃(1013 hPa) ● Water absorption 320 g/kg (20℃) ● Ignition temp. 480℃ (DIN51794)

● IMDG NO Dangerous Good ● HS Code 2914 39 00
● Merck Index 10, 713

Appearance ····· Yellow crystalline powder.
Melting point ····· 153-159℃
Assay ····· Min 98.0%

NEW

Product No.	Packing	Price(₩)
4680	25g	56,300

Antimony(Ⅲ) chloride → *go to Antimony Trichloride*

Antimony(Ⅲ) Oxide → *go to Antimony Trioxide*

Antimony potassium tartrate
→ *go to Antimony Potassium Tartrate hemihydrate*

Antimony Potassium Tartrate trihydrate — Extra Pure

토주석, Antimony potassium tartrate, Potassium Antimony tartrate, tartar emetic
● CAS No. 28300-74-5 ● EC No.237-360-5
● $C_8H_4K_2O_{12}Sb_2 \cdot 3H_2O$ ● FW 667.68

● Spec. density 2.607 g/cm³ ● Solub. in H_2O 55 g/l (20℃) ● pH value ~4.0 (50 g/l, H_2O, 20℃) ● Bulk density ~1250 kg/m³

● IMDG UN1551 ANTIMONY POTASSIUM TARTRATE HEMIHYDRATE, 6, 1, Ⅲ
● HS Code 2918 13 00 ● RTECS CC6825000 ● Merck Index 10, 725

Appearance ····· Colorless crystals or white crystalline powder.
Assay ····· Min 99.5%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.001%
Sulfate (SO_4) ····· Max 0.005%
Copper (Cu) ····· Max 0.001%
Calcium(Ca) ····· Max 0.005%
Zinc (Zn) ····· Max 0.001
Lead (Pb) ····· Max 0.005%
Arsenic (As) ····· Max 5 ppm
Iron(Fe) ····· Max 5 ppm

Product No.	Packing	Price(₩)
818	500g	36,000

Antimony Powder

안티모니, 분말
● CAS No. 7440-36-0 ● EC No. 231-146-5
● Sb ● AW 121.750

Antimony Powder — Extra Pure

Product No.	Packing	Price(₩)
810	500g	19,500

Antimony Powder — CP

Product No.	Packing	Price(₩)
1871	500g	19,500

Antimony Trichloride — GR

염화안티모니, Antimony (Ⅲ) Chloride
● CAS No. 10025-91-9 ● EC No. 233-047-2
● $SbCl_3$ ● FW 228.11

● Vapour pressure 0.16 hPa (20℃) ● Spec. density 3.14 g/cm³ (20℃) ● Solub. in H_2O 931 g/l (20℃) (hydrolysis) ● Melting point 73℃ ● Bulk density ~1600 kg/m³ ● Boiling point 233℃ (1013 hPa)

● IMDG UN1733 ANTIMONY TRICHLORIDE, 8, II ● HS Code 2827 39 00
● RTECS CC4900000 ● Merck Index 10, 720

Appearance ····· White~Yellow crystal or crystal lump
Assay ····· Min 98.0%
Solubility in dil. HCl ····· To pass test
Sulfur compound(as SO_4) ····· Max 0.01%
Sodium (Na) ····· Max 0.005%
Copper (Cu) ····· Max 5 ppm
Lead (Pb) ····· Max 0.003%
Arsenic (As) ····· Max 0.002%
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
813	500g	27,000

Antimony Trioxide — CP

삼산화안티모니, Antimony(III) Oxide
● CAS No. 1309-64-4 ● EC No. 215-175-0
● Sb_2O_3 ● FW 291.50

● Vapour pressure 13.3hPa (660℃) ● Spec. density 5.4g/cm³ ● Solub. in H_2O 2.70 mg/l (20℃) ● Melting point 656℃ (sublimed) ● Bulk density 800~1300 kg/m³ ● Boiling point 1550℃ (1012 hPa)

● IMDG UN1549 ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S., 6.1, III
● HS Code 2825 80 00 ● RTECS CC5650000

Assay ····· Min 98.0 ~ 100.0%
Chloride (Cl) ····· Max 0.1%
Sulfate (SO_4) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.02%
Iron (Fe) ····· Max 0.01%
Arsenic (As) ····· To pass test

Product No.	Packing	Price(₩)
814	500g	23,000

Arabic Gum, powder — Extra Pure

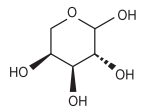
아라빅검
● CAS No. 9000-01-5 ● EC No. 232-519-5

Appearance ····· White ~ pale yellow – white, No smell, and taste.
Hydrochloric Acid insoluble Matter ····· Max 0.2%
Tannin-bearing gums ····· To pass test
Starch or Dextrin ····· To pass test
Loss on drying ····· Max 15%
Acid-insoluble ash ····· Max 0.5%
Ash ····· Max 4.0%

Product No.	Packing	Price(₩)
1677	500g	15,000

NEW

L(+)-Arabinose Extra Pure



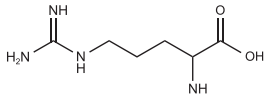
Chiral L(+)-아라비노오스

- CAS No. 87-72-9(5328-37-0)
- $C_5H_{10}O_5$ • FW 150.13

- HS Code 2940 00 00

Product No.	Packing	Price(₩)
5113	25g	42,000

L-Arginine Extra Pure



L-아르기닌

- CAS No. 74-79-3 • EC No. 200-811-1
- $C_6H_{14}N_4O_2$ • FW 174.20

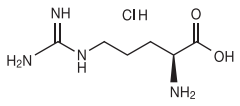
- Explosive limit 30 g/m³ • Solub. in H_2O 148.7 g/l (20℃) • pH value ~11.4 (100 g/l, H_2O, 20℃)
- Melting point 238℃ (decompostion) • Bulk density ~640 kg/m³

- IMDG No Dangerous Good • HS Code 2925 29 00
- RTECS CF1934200

Product No.	Packing	Price(₩)
825	25g	8,800

NEW

L-Arginine Monohydrochloride Extra Pure



Chiral L-아르기닌수화염화물

- CAS No. 1119-34-2 • EC No. 214-275-1
- $C_6H_{15}ClN_4O_2$ • FW 210.66

- Spec. density 1.42 g/cm³ (20 ℃) • Solub. in H_2O 730 g/l (20℃) • pH value ~ 5.7 (100 g/l, H_2O, 20 ℃) • Melting point 218 ℃ • Bulk density ~ 1250 kg/m³

- IMDG NO Dangerous Good • HS Code 2925 29 00

Product No.	Packing	Price(₩)
5114	25g	8,800

NEW

Arsenic Trioxide Extra Pure

삼산화비소, Arsenic(III) Oxide

- CAS No. 1327-53-3
- As_2O_3 • FW 197.84

- IMDG UN1561 ARSENIC TRIOXIDE, 6.1, II • HS Code 2811 29 10

Appearance ····· White~Yellowish powder.
Assay ····· Min 99.0%
Solubility in NH_4 OH solution ····· To pass test
Non-volatile matter ····· Max 0.2%
Iron (Fe) ····· Max 0.01%

Product No.	Packing	Price(₩)
5057	25g	11,000

Arsenic(III) Oxide → *go to Arsenic Trioxide*

L-Ascorbic Acid GR

아스코빅산(비타민C), Vitamin C

- CAS No. 50-81-7
- $C_6H_8O_6$ • FW 176.13

- Spec. density 1.65 g/cm³(20℃) • Melting point 190~192℃ • $[\alpha]_D^{20}$+20.0℃ (C=1, H_2O, 25℃)

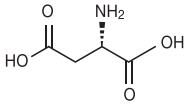
Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.5%
Solubility in water ····· To pass test
Specific rotation (α) 20 D ····· +20.5 ~ +21.5
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.002%
Copper (Cu) ····· Max 0.3ppm
Zinc (Zn) ····· Max 0.2ppm
Lead (Pb) ····· Max 5ppm
Iron(Fe) ····· Max 5ppm
Nickel (Ni) ····· Max 5ppm

Product No.	Packing	Price(₩)
831	25g	5,300
832	500g	25,000

L-Ascorbic Acid Sodium Salt → *go to Sodium L-Ascorbate*

NEW

L(+)-Aspartic Acid Extra Pure



Chiral L-아스파틴산, L-Aminosuccinicacid

- CAS No. 56-84-8 • EC No. 200-291-6
- $C_4H_7NO_4$ • FW 133.1

- Solub. in H_2O 4 g/l (20℃) • pH value 2.5 – 3.5 (4 g/l, H_2O, 20 ℃) • Melting point 269 – 271 ℃ (decomposition) • Bulk density ~ 430 kg/m³

- IMDG NO Dangerous Good • HS Code 2922 49 95
- Merck Index 10, 853

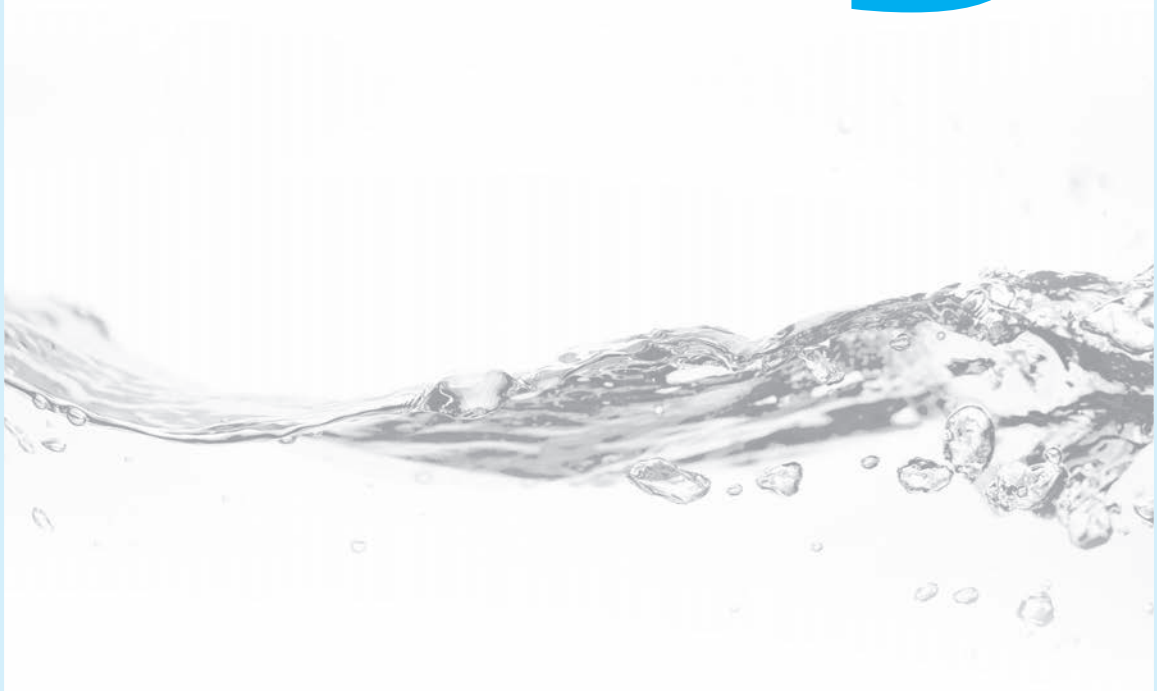
Product No.	Packing	Price(₩)
5115	500g	42,000

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

B



Alphabetical list Numbers

List of B

B

Product	Page
Balsam canada	74
Barium Carbonate	74
Barium Chloride dihydrate	74
Barium Dioxide	74
Barium diphenylamine Sulfonate	74
Barium diphenylamine-4-sulfonate	74
Barium Hydroxide octahydrate	74
Barium Nitrate	74
Barium Peroxide	74
Barium Stearate	75
Barium Sulfate	75
Basic Orange 14	75
Bees Wax White	75
Benedict's solution	75
Bentonite	75
Benzaldehyde	75
Benzalkonium Chloride 50%	75
Benzamide	76
Benzene	76
Benzethonium Chloride	76
1,2-Benzenedicarbonic acid anhydride	76
1,4-Benzenediol	76
Benzoic Acid	77
Benzoin	77
α-Benzoine oxime	77
Benzophenone	77
1,2,3-Benzotriazol	77
1H-Benzotriazole	77
6-Benzyl Adenine	77
6-Benzylaminopurine	77
Benzyl Alcohol	78
Benzyl Amine	64
Benzyl Chloride	78
40% Benzyl trimethyl ammonium Hydroxide Methanol solution	78
BHT	78
Biebrich Scarlet	78
2,2'-Bipyridyl	78
Bis(trimethylsilyl)amine	79
Bismarck Brown Y	79
Bismuth(Ⅲ) Nitrate pentahydrate	79
Bismuth trioxide	79
Bismuth(Ⅲ) oxide	79
Bisphenol-A	79
Bitter almond oil	79
Blanc fixe	79
Boiling Stone	79
Borax	79
Boric acid	80
Boric anhydride	80

Product	Page
Boron Nitride	80
Boron trioxide	80
Brilliant green	80
N/10-Bromine (0.05M)	80
Bromocresol green	80
Bromocresol Green solution	80
Bromocresol Green - Methyl Red solution	80
Bromocresol Purple	81
Bromocresol Purple solution	81
Bromophenol blue	81
Bromophenol Blue solution	81
Bromothymol blue	81
Bromothymol blue solution	81
Brucine	81
40% BTMAH Methanol solution	81
Buffer Solution Standard pH 2.00	81
Buffer Solution Standard pH 3.00	81
Buffer Solution pH4.01	82
Buffer Solution pH4.6	82
Buffer Solution pH5	82
Buffer Solution pH6	82
Buffer Solution pH6.86	82
Buffer Solution pH7.00	82
Buffer Solution pH9.18	82
Buffer Solution pH10.00	82
Buffer Solution pH11.00	82
Buffer Solution pH12.00	82
Buffer Solution pH13.00	82
Buffered Oxide Etchant 10:1	82
Buffered Oxide Etchant 6:1	82
Butanedioic acid	83
1,4-Butanediol	83
1-Butanol	83
2-Butanol	83
2-Butoxyethanol	83
n-Butyl Acetate	83
Butyl Acrylate	84
n-Butyl Alcohol	84
sec-Butyl Alcohol	84
tert-Butyl Alcohol	85
n-Butylamine	85
tert-Butyl Amine	85
Butyl Carbitol	85
Butylated Hydroxy Toluene	85
Butyl Carbitol Acetate	86
Butyl cellosolve	86
Butyl Methacrylate monomer	86
tert-Butyl methyl ether	86
Butyl octadecanoate	86

Product	Page
Butyl Paraben	86
Butyl Stearate	86
Butyl–4–hydroxybenzoate	86
N–Butyl–1–butanamine	86
1,4–Butylene glycol	86
Butyric Acid	86
gamma–Butyrolactone	87

Balsam canada → *go to Canada Balsam*

Barium Carbonate CP

탄산바륨
● CAS No. 513-77-9 ● EC No. 208-849-0
● $BaCO_3$ ● FW 197.35

● Spec. density 4.43 g/cm³(20℃) ● Solub. in H_2O 0.02 g/l (20℃) ● pH value 7~8 (0.016 g/l, H_2O, 16℃) ● Melting point > 1450℃(decomposition)

● IMDG UN1564 BARIUM COMPOUND, N.O.S., 6.1, Ⅲ ● HS Code 2863 60 00
● RTECS CQ8600000 ● Merck Index 10, 967

Appearance ····· Heavy white powder, soluble in water and does not.
Assay ····· 99.0~103.0%

Product No.	Packing	Price(₩)
956	500g	7,000

Barium Chloride, dihydrate

염화바륨
● CAS No. 10326-27-9 ● EC No. 233-788-1
● $BaCl_2 \cdot 2H_2O$ ● FW 244.285

● Spec. density 3.86 g/cm³ ● Solub. in H_2O 375 g/l (20℃)(anhydrous substance) ● pH value 2.5~8.0 (50 g/l, H_2O, 25℃) ● Melting point 963℃(anhydrous substance) ● Bulk density ~1200-1400 kg/cm³ ● Boiling point 1560℃ (anhydrous substance)

● IMDG UN1564 BARIUM COMPOUND, N.O.S., 6.1, Ⅲ ● HS Code 2827 39 00
● RTECS CQ8751000 ● Merck Index 10, 969

Barium Chloride, dihydrate CP

Appearance ····· Colorless ~ white, crystalline powder. Easily soluble in water.
Iron(Fe) ····· Max 0.005%
Assay ····· Min 98.5%

Product No.	Packing	Price(₩)
958	500g	6,000
5442	1Kg	11,300

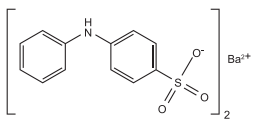
Barium Chloride, dihydrate Extra Pure

Product No.	Packing	Price(₩)
1822	25kg	312,500

Barium Dioxide → *go to Barium Peroxide*

NEW

Barium diphenylamine Sulfonate Extra Pure



바륨디페닐아민황산염, Barium diphenylamine-4-sulfonate
● CAS No. 6211-24-1 ● EC No. 228-278-0
● $Ba(C_{12}H_{10}NO_3S)_2$ ● FW 633.90

● Solub. in H_2O (20℃) soluble ● pH value ~5.9 (10g/l, H_2O, 20℃)(slurry) ● Melting point 300℃
● Bulk density ~200kg/m³

● IMDG UN 1564 BARIUM COMPOUND, N.O.S., 6.1, III ● HS Code 2921 44 00

Appearance ····· White to gray solid.
Sensitivity as redox indicator ····· To pass test
Loss on drying (105℃) ····· Max 10%

Product No.	Packing	Price(₩)
4657	25g	75,000

Barium diphenylamine-4-sulfonate
→ *go to Barium diphenylamine Sulfonate*

Barium Hydroxide, octahydrate

수산화바륨
● CAS No. 12230-71-6 ● EC No. 241-234-5
● $Ba(OH)_2 \cdot 8H_2O$ ● FW 315.48

● Spec. density 2.18 g/cm³ (20℃) ● Solub. in H_2O 72 g/l (20℃) ● pH value ~14 (20℃)(saturated aqueous solution) ● Melting point 78℃ ● Bulk density ~900-1100 kg/cm³ ● Decomposition point (release of crystaline water)

● IMDG UN3262 CORROSIVE SOLID BASIC, TOXIC, N.O.S.(BARIUM HYDROXID), 8, II ● HS Code 2816 40 00 ● Merck Index 10, 977
Appearance ····· White crystal
Assay ····· Min 98.0%

Barium Hydroxide, octahydrate CP

Product No.	Packing	Price(₩)
960	500g	10,000
3803	1kg	18,000

Barium Hydroxide, octahydrate Extra Pure

Product No.	Packing	Price(₩)
5400	1kg	18,000

Barium Nitrate Extra Pure

질산바륨
● CAS No. 10022-31-8 ● EC No. 233-020-5
● $Ba(NO_3)_2$ ● FW 261.35

● Vapour pressure (20℃) low ● Spec. density ~3.2 g/cm³ (20℃) ● Solub. in H_2O 90 g/l (20℃) ● pH value 5.0~8.0 (50 g/l, H_2O, 25℃) ● Melting point ~592℃ ● Bulk density 1900 kg/cm³ ● Boiling point 1560℃ (anhydrous substance)

● IMDG UN1446 BARIUM NITRATE, 5.1 (6.1), II ● HS Code 2834 299 00
● RTECS CQ9625000 ● 1류 질산염류 300kg ● Merck Index 10, 983

Appearance ····· White crystal or crystalline powder. Soluble in water. Neutral litmus paper. insoluble Ethanol
Solubility in water ····· To pass test
chloride (Cl) ····· Max 0.005%
Heavy metals (Pb) ····· Max 0.01%
Iron (Fe) ····· Max 0.001%
Assay ····· Min 98.5%

Product No.	Packing	Price(₩)
961	500g	15,000

Barium Peroxide Extra Pure

과산화바륨, Barium dioxide
● CAS No. 1304-29-6 ● EC No. 215-128-4
● BaO_2 ● FW 169.36

● Vapour pressure (20℃) low ● Spec. density 4.96 g/cm³ (20℃) ● Solub. in H_2O

(20℃) low (decomposition) ● pH value ~12 (10 g/l, H_2O, 20℃)(slurry) ● Melting point 450℃ ● Bulk density ~1700-2000 kg/cm³ ● Boiling point 1560℃ (anhydrous substance)

● IMDG UN1449 BARIUM PEROXIDE, 5. 1 (6.1), II ● HS Code 2816 40 00
● 1류 무기과산화물

Appearance ····· White or grayish white powder.
Assay ····· Min 80.0%
Chloride (Cl) ····· Max 0.15%
Heavy metals (as Pb) ····· Max 0.01%
Iron (Fe) ····· Max 0.03%
Substances not precipitated by H_2SO_4 (as So_4) ····· To pass test

Product No.	Packing	Price(₩)
962	500g	40,500

Barium Stearate — CP

스테아린산바륨
● CAS No. 6865-35-6
● $Ba[CH_3(CH_2)_{16}COO]_2$ ● FW 704.13

Product No.	Packing	Price(₩)
963	500g	11,000

Barium Sulfate

황산바륨, Blanc fixe
● CAS No. 7727-43-7 ● EC No. 231-784-4
● $BaSO_4$ ● FW 233.43

● Spec. density 4.5 g/cm³ (20℃) ● Solub. in H_2O 0.05 g/l (20℃) ● pH value 3.5~10.0 (100 g/l, H_2O, 20℃)(suspension) ● Melting point 1380℃ ● Bulk density ~500 kg/cm³ ● Boiling point 1560℃ (anhydrous substance)

● IMDG No Dangerous Good ● HS Code 2833 27 00
● RTECS CY1400000 ● 4류 제1석유류(비수용성액체) 200ℓ

Barium Sulfate — Extra Pure

Appearance ····· Heavy white powder. Odorless and tasteless.
Ignition loss ····· Max 2.0%
Free acid (as H_2SO_4) ····· To pass test
Free alkali ····· To pass test
Phosphate (PO_4) ····· To pass test
Sulfide (SO_2) ····· To pass test
Soluble salts ····· Max 0.3
Soluble Barium ····· To pass test
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.005%
Arsenic (As) ····· Max 1 ppm
Precipitated test ····· To pass test

Product No.	Packing	Price(₩)
964	500g	6,000

Barium Sulfate — CP

Appearance ····· Heavy white powder. Odorless and tasteless.
Free alkali ····· To pass test
Heavy metals (as Pb) ····· Max 0.005%
Soluble Barium ····· To pass test

Product No.	Packing	Price(₩)
965	500g	5,000
966	25kg	165,000

Basic Orange 14 → *go to Acridine Orange*

Bees Wax, White — Extra Pure

밀납
● CAS No. 8012-89-3

Product No.	Packing	Price(₩)
5667	500g	22,000

Benedict's Solution — Indicator soiution

Product No.	Packing	Price(₩)
2778	500㎖	8,800

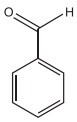
Bentonite — Extra Pure

벤토나이트
● CAS No. 1302-78-9

Appearance ····· White ~ pale yellow or pale green, fine powder or granules. No smell.
Sedimentation volume ····· To pass test
Sewlling Force ····· To pass test
Loss on drying ····· 5.0~10.0%
Heavy metals (as Pb) ····· Max 0.001%
Arsenic (As) ····· Max 4 ppm

Product No.	Packing	Price(₩)
968	500g	3,800
969	1kg	6,000
970	25kg	68,800

Benzaldehyde — Extra Pure



벤즈알데하이드, Bitter almond oil
● CAS No. 100-52-7 ● EC No. 202-860-4
● C_6H_5CHO ● FW 106.13

● Vapour pressure 1.3 hPa (20℃) ● Spec. density 1.05 g/cm³(20℃) ● Explosive limits 1.4~8.5 vol%
● Flash point 64℃ c.c. ● Solub. in H_2O 3.3 g/l (20℃)
● pH value ~5.9 (1 g/l, H_2O) ● Melting point -26℃
● Boiling point 179℃(1013 hPa) ● Ignition temp. 190℃

● IMDG UN1990 BENZALDEHYDE, 9, Ⅲ ● HS Code 2912 21 00
● 4류 제2석유류(비수용성액체) 1000ℓ ● Merck Index 10, 1054

Appearance ····· Almond Flavor Liquid.
Density (20℃) ····· 1.041 ~ 1.050 g/ml
Color ····· Max 50 AHPA
Chloride ····· Max 0.02%
Assay(by GC) ····· Min 99.0%

Product No.	Packing	Price(₩)
1873	500㎖	7,500

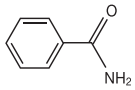
Benzalkonium Chloride 50% — CP

염화벤질코늄(50%)
● CAS No. 8001-54-5

Product No.	Packing	Price(₩)
972	500㎖	10,000

B

Benzamide — Extra Pure



벤즈아미드, Benzoylamide
● CAS No. 55-21-0 ● EC No. 200-227-7
● C_7H_7NO ● FW 121.14

● Vapour pressure 0.000056 hPa (20℃) ● Spec. density 1.34 g/cm³(20℃) ● Flash point 180℃ c.c ● Solub. in H_2O 13g/l (20℃) ● pH value 6.9 (saturated solution) ● Bulk density 550 kg/m³ ● Melting point −129 ℃ ● Ignition temp. 〉500℃

● IMDG NO Dangerous Good ● HS Code 2924 29 90
● RTECS CU8700000 ● Merck Index 10, 1056

Product No.	Packing	Price(₩)
5116	25g	8,800

Benzene

벤젠, Cyclohexatriene
● CAS No. 71-43-2 ● EC No. 200-753-7
● C_6H_6 ● FW 78.11

● Vapour pressure 101 hPa (20℃) ● Spec. density 0.88 g/cm³(20℃) ● Explosive limits 1.4~8.0 vol% ● Flash point −11℃ (DIN51755) ● Solub. in H_2O 1.8 g/l (20℃) ● Saturation conc. 319 g/m³ (20℃) ● Melting point −5.5℃ ● Boiling point 80.1℃ ● Ignition temp. 555℃ (DIN51794)

● IMDG UN1114 BENZENE, 3, II ● HS Code 2902 20 00
● RTECS CY1400000 ● 4류 제1석유류(비수용성액체) 200ℓ

Benzene — Extra Pure

Appearance ····· Colorless, Clear, characteristic odor of volatile liquids.
Assay (by GC) ····· Min 99.5%
Freezing point ····· Min 5.0 ℃
Density (20℃) ····· 0.876~0.880 g/ml
Water ····· Max 0.05%
Residue after evaporation ····· Max 0.005%
Acidity (as CH_3COOH) ····· To pass test
Alkalinity (as NH_3) ····· To pass test
Thiophene ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
977	500㎖	3,800
978	1ℓ	6,300
979	18ℓ	51,300
1826	200ℓ	Call

Benzene — GR

Appearance ····· Colorless, Clear, characteristic odor of volatile liquids.
Assay (by GC) ····· Min 99.5%
Freezing point ····· Min 5.2 ℃
Density (20℃) ····· 0.876~0.880 g/ml
Refractive index (n 20 D) ····· 1.499 ~ 1.502
Water ····· Max 0.04%
Residue after evaporation ····· Max 0.001%
Acidity (as HCl) ····· Max 4 ppm
Alkalinity (as NH_3) ····· Max 4 ppm
Sulfur Compounds (as S) ····· Max 0.05%
Thiophene ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
975	1ℓ	7,000
3872	2.5ℓ	11,000
976	4ℓ	23,000

Benzene — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
280 nm ····· Max 1.00
290 nm ····· Max 0.15
300 nm ····· Max 0.05
330 nm ····· Max 0.01
350 nm ····· Max 0.005
UV Cutoff ····· Max 280 nm
Assay (by GC) ····· Min 99.7%
Color (APHA) ····· Max 10
Water ····· Max 0.03%
Residue after evaporation ····· Max 5 ppm
Substances darkened by sulfuric acid ····· To pass test
Thiophene (limit about 1ppm) ····· To pass test
Sulfur Compounds (as S) ····· Max 0.005%

Product No.	Packing	Price(₩)
980	4ℓ	38,800

Benzene — PESTICIDE

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10 ppt
Assay (by GC) ····· Min 99.7%
Color (APHA) ····· Max 10
Water ····· Max 0.03%
Residue after Evaporation ····· Max 5 ppm

Product No.	Packing	Price(₩)
981	4ℓ	43,800

Benzene — Ultimate

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10 ppt
Ultraviolet Spectrophotometry
280nm ····· Max 1.00
290nm ····· Max 0.15
300nm ····· Max 0.05
330nm ····· Max 0.01
350nm ····· Max 0.005
UV cutoff ····· Max 280 nm
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.03%
Residue after Evaporation ····· Max 1 ppm
Fluorescence Background ····· To pass test
Substances darkened by sulfuric acid ····· To pass test
Thiophene (Limit about 1 ppm) ····· To pass test
Sulfer compounds (as S) ····· Max 0.005%

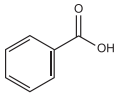
Product No.	Packing	Price(₩)
1828	4ℓ	50,000

Benzethonium Chloride → *go to L-Histidine*

1,2-Benzenedicarbonic acid anhydride → *go to Phthalic anhydride*

1,4-Benzenediol → *go to Hydroquinone*

Benzoic Acid — Extra Pure



벤조산(안식향산), Phenylformic acid, Benzene carboxylic acid

● CAS No. 65-85-0 ● EC No. 200-618+2
● C_6H_5COOH ● FW 121.93

● Vapour pressure 0.001 hPa (20℃) ● Spec. density 1.321 g/cm³(20℃) ● Flash point 121℃ c.c. ● Solub. in H_2O 2.9 g/l (25℃) ● pH value 2.5~3.5 (H_2O, 20℃) (saturated solution) ● Melting point 121~123℃ ● Bulk density ~500 kg/cm³ ● Boiling point 249℃(1013 hPa) ● Ignition temp. 570℃

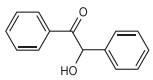
● IMDG No Dangerous Good ● HS Code 2916 31 00
● RTECS DG0875000 ● Merck Index 10, 1093

Appearance ····· White crystal. Soluble in Ethanol, Ether, Chloroform. insoluble Water.
Assay ····· Min 99.5%
Solubility in NH_4OH ····· To pass test
Melting point ····· 121~124 ℃
Ignition residue (as Sulfate) ····· Max 0.02%
Chloride (Cl) ····· Max 0.005%
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%
Substances reducing permanganate ····· To pass test

Product No.	Packing	Price(₩)
983	500g	6,800
1829	1kg	11,800
984	20kg	100,000

NEW

Benzoin — Extra Pure



벤조인, 2-Hydroxy-1,2-diphenylethanone
● CAS No. 119-53-9 ● EC No. 204-331-3
● $C_{14}H_{12}O_2$ ● FW 212.24

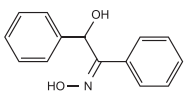
● Vapour pressure 1.3 hPa (136 ℃) ● Spec. density 1.31 g/cm³(20℃) ● Flash point 181℃ c.c ● Solub. in H_2O 0.3 g/l (25℃) ● Melting point 132-134 ℃ ● Bulk density 350 kg/m³ ● Boiling point 344 ℃ (1023 hPa)

● IMDG NO Dangerous Good ● HS Code 2914 40 90
● RTECS DI1590000 ● Merck Index 10, 1095

Product No.	Packing	Price(₩)
5117	25g	6,500

NEW

α-Benzoine oxime — Extra Pure / AR



Cuprone
● CAS No. 441-38-3 ● EC No. 207-127-2
● $C_6H_5CH(OH)C(:NOH)C_6H_5$ ● FW 227.26

● Melting point 153-154 ℃

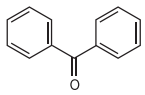
● IMDG No Dangerous Good ● HS Code 2928 00 90

Appearance ····· White crystalline powder.
Melting point ····· 151~155 ℃
Solubility in water ····· To pass test
Sensitivity to Cu ····· To pass test
Sensitivity to Mo ····· To pass test

Product No.	Packing	Price(₩)
4656	25g	25,500

Benzophenone — Extra Pure

NEW



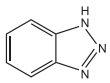
벤조페논, Benzoylbenzene
● CAS No. 119-61-9 ● EC No. 204-337-6
● $C_{13}H_{10}O$ ● FW 182.22

● Vapour pressure 0.004 hPa (20℃) ● Spec. density 1.1 g/cm³(25℃) ● Flash point 150 ℃(DIN51758) ● Solub. in H_2O 0.14 g/l (25℃) ● Melting point 47-49 ℃ ● Bulk density 700 kg/m³ ● Boiling point 304-306 ℃

● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BENZOPHENONE), 9, Ⅲ ● HS Code 2914 39 00 ● Merck Index 10, 1101

Product No.	Packing	Price(₩)
5118	500g	15,000

1,2,3-Benzotriazol — GR



벤조트리아졸, 1H-Benzotriazol
● CAS No. 95-14-7 ● EC No. 202-394-1
● $C_6H_5N_3$ ● FW 119.13

● Vapour pressure 0.053 hPa (20℃) ● Spec. density 1.36 g/cm³(20℃) ● Flash point 212℃ c.c. (DIN51758) ● Solub. in H_2O 19 g/l (20℃) ● pH value 6.0~7.0 (100 g/l, H_2O, 20℃)(saturated solution) ● Melting point 99℃ ● Bulk density ~500 kg/cm³ ● Boiling point 204℃(20 hPa) ● Ignition temp. ~400℃

● IMDG No UN2926 FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (1H-BENZOTRIAZOL), 4. 1(6.1), Ⅱ ● HS Code 2933 99 00
● RTECS DM1225000 ● Merck Index 10, 1112

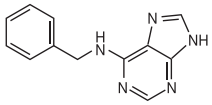
Appearance ····· White ~ pale yellow pillow crystals or powder.
Melting point ····· 96.5~98.5 ℃
Solubility in ethanol ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.05%
Water ····· Max 0.5%
Assay ····· Min 98.0%

Product No.	Packing	Price(₩)
988	500g	39,000

1H-Benzotriazole → *go to 1,2,3-Benzotriazol*

6-Benzyl Adenine — Extra Pure

NEW



6-벤질아데닌, 6-Benzylaminopurine
● CAS No. 1214-39-7
● $C_{12}H_{11}N_5$ ● FW 225.26

● Melting point 230~234 ℃

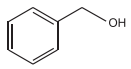
● HS Code 2993 59 95

Product No.	Packing	Price(₩)
5119	25g	120,000

6-Benzylaminopurine → *go to 6-Benzyl Adenine*

B

Benzyl Alcohol



벤질알콜, Phenylcarbinol
● CAS No. 100-51-6 ● EC No. 202-859-9
● $C_6H_5CH_2OH$ ● FW 108.14

● Vapour pressure 0.13 hPa (20℃) ● Spec. density 1.05 g/cm³ (20℃) ● Explosive limit 1.3~13 Vol% ● Flash point 101℃ ● Solub. in H_2O 40 g/l (20℃) ● Saturation conc. 0.56 g/m³ ● Melting point −15.3℃ ● Boiling point 205℃(1013 hPa) ● Ignition temp. 435℃

● IMDG No Dangerous Good ● HS Code 2906 21 00
● RTECS DN3150000 ● 4류 제3석유류(비수용성액체) 2000ℓ ● Merck Index 10, 1130

Benzyl Alcohol — Extra Pure

Appearance ····· Clear, Colourless liquid
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Density (20℃) ····· 1.043~1.048 g/ml
Water ····· Max 0.3%
Ignition residue (as Sulfate) ····· Max 0.01%
Acidity (as C_6H_5COOH) ····· Max 0.03%
Total Chlorine ····· To pass test
Benzaldehyde ····· To pass test

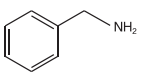
Product No.	Packing	Price(₩)
992	500g	9,400
993	1kg	16,000
994	18kg	137,500

Benzyl Alcohol — GR

Appearance ····· Clear, Colourless liquid.
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Density (20℃) ····· 1.043 ~ 1.048 g/ml
Refractive index (n 20 D) ····· 1.538 ~ 1.541
Water ····· Max 0.2%
Ignition residue (as Sulfate) ····· Max 0.005%
Acidity (as C_6H_5COOH) ····· Max 0.02%
Total Chlorine ····· To pass test
Benzaldehyde ····· Max 0.2

Product No.	Packing	Price(₩)
991	1kg	18,800
4967	2.5ℓ	31,300

Benzyl Amine — GR



벤질아민, 1-Phenylmethanamine, Phenylmethylamine
● CAS No. 100-46-9 ● EC No. 202-854-1
● $C_6H_5CH_2NH_2$ ● FW 107.15

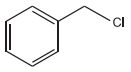
● Refractive index 1.544 (20℃) ● Vapour pressure 1.2 hPa (20℃) ● Spec. density 0.98 g/cm³ (20℃) ● Explosive limit 0.7~8.2%(V) ● Flash point 72℃ ● Solub. in H_2O Soluble ● pH value 11.4 (100 g/ℓ, H_2O, 20℃) ● Melting point −42.8℃ ● Boiling point 185℃

● IMDG No UN2735 AMINES, LIQUID, CORROSIVE, N.O.S.(BENZYLAMINE), 8, I
● HS Code 2921 49 00
● 4류 2석유류(수용성 액체) 2000ℓ

Appearance ····· Colorless to pale yellow liquid.
Assay (by GC) ····· Min 99.0%
Water ····· Max 0.3%
Color(APHA) ····· Max 50
Specific gravity at 20℃ ····· 0.979 ~ 0.984
Refractive index at 20℃ ····· 1.541 ~ 1.546
Solubility in water ····· To pass test

Product No.	Packing	Price(₩)
3762	1kg	30,000

Benzyl Chloride — Extra Pure



염화벤질, α-Chlorotoluene
● CAS No. 100-44-7 ● EC No. 202-853-6
● $C_6H_5CH_2Cl$ ● FW 126.59

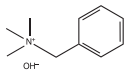
● Vapour pressure 1.2 hPa (20℃) ● Spec. density 1.10 g/cm³ (20℃) ● Explosive limit 1.1~14 Vol%
● Flash point 52℃ c. c. ● Solub. in H_2O 460 g/l (30℃)
● Melting point −41.2℃ ● Boiling point 179.3℃(1013 hPa) ● Ignition temp. 585℃

● IMDG No UN1738 BENZYL CHLORIDE, 6.1,(8), II ● HS Code 2903 69 00
● RTECS XS8925000 ● 4류 제2석유류(비수용성액체) 1000ℓ ● Merck Index 10, 1136

Fraction (178~181℃) ····· 93.0~100.0 Vol %
Ignition residue (as Sulfate) ····· Max 0.006%
Free acid (as HCl) ····· Max 0.02%

Product No.	Packing	Price(₩)
997	1kg	11,300

40% Benzyltrimethylammonium Hydroxide Methanol solution — Extra Pure



40% BTMAH Methanol solution
● CAS No. 100-85-6
● $[C_6H_5CH_2N(CH_3)_3]OH$ ● FW 167.25

● Spec. density 0.92 g/cm³ (20℃) ● Explosive limit 5.5 ~ 26.5 Vol% (methanol) ● Flash point 13℃ ● Solub. in H_2O (20℃) soluble

● IMDG UN3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O., 3, II
● HS Code 2923 90 00

Product No.	Packing	Price(₩)
3670	500mℓ	Call

BHT → *go to Butylated Hydroxy Toluene*

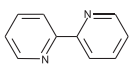
Biebrich Scarlet — Extra Pure NEW

비에브리치 진홍색, Acid Red 66
● CAS No. 4196-99-0
● $C_{22}H_{14}N_4Na_2O_7S_2$ ● FW 556.49

● HS Code 3204 12 00

Product No.	Packing	Price(₩)
5120	25g	17,000

2,2'-Bipyridyl — GR / AR / ACS NEW



2,2'-비피리딜, α,α'-Dipyridyl
● CAS No. 366-18-7 ● EC No. 206-674-4
● $C_{10}H_8N_2$ ● FW 156.19

● Flash point 121℃ ● Solub.in H_2O 5.5 g/l (22℃) ● Melting point 70-72 ℃ ● Bulk density ~500 kg/m³ ● pH value ~7.5 (5 g/l, H_2O, 25 ℃) ● Boiling point ~ 272 ℃(1013 hPa)

● IMDG UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (2,2-BIPYRIDINE), 6.1, III
● HS Code 2933 39 99

Appearance ····· White~Yellowish powder.
Assay ····· Min 99.5%
Solubility in Ethanol ····· To pass test
Melting point ····· 69.5~72.0 ℃
Ignition residue (as Sulfate) ····· Max 0.05%

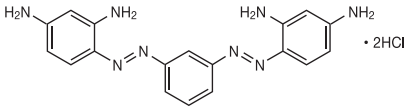
Suitability for iron determination ····· To pass test
Hydrochloric acid soluble matter ····· To pass test

Product No.	Packing	Price(₩)
5072	25g	45,000

Bis(trimethylsilyl)amine → *go to 1,1,1,3,3,3-Hexamethyldisilazane*

NEW

Bismarck Brown Y — Extra Pure



비스마르크 브라운 Y
- CAS No. 10114-58-6
- $C_{18}H_{18}N_8 \cdot 2HCl$ • FW 419.32

Product No.	Packing	Price(₩)
5121	25g	31,500

Bismuth (Ⅲ)Nitrate, pentahydrate — Extra Pure

질산비스무트
- CAS No. 10035-06-0
- $Bi(NO_3) \cdot 5H_2O$ • FW 485.10

Product No.	Packing	Price(₩)
998	25g	5,300

Bismuth Trioxide — Extra Pure

삼산화비스무트, Bismuth (Ⅲ) Oxide
- CAS No. 1304-76-3 • EC No. 215-134-7
- Bi_2O_3 • FW 465.96

• Spec. density 8.93 g/cm³ (20℃) • Solub. in H_2O (20℃) almos insoluble • Melting point 817℃ • Boiling point ~1564℃(1013 hPa)

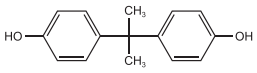
• IMDG No Dangerous Good • HS Code 8106 00 00

Appearance ····· Yellow crystals or powder.
Assay ····· Min 99.0%
Solubility in dil. HCl ····· To pass test
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.01%
Iron (Fe) ····· Max 0.01%
Lead (Pb) ····· Max 0.01%
Copper (Cu) ····· Max 0.002%
Arsenic (As) ····· Max 1 ppm

Product No.	Packing	Price(₩)
999	500g	45,000

Bismuth(Ⅲ) oxide → *go to Bismuth trioxide*

Bisphenol A — Extra Pure



비스페놀 A, 2,2'-(4,4'-Dihydroxydiphenyl)propane, 2,2-Bis(4-hydroxyphenyl)propane, 4,4'-Iso-propylidenediphenol, Bisphenol
- CAS No. 80-05-7 • EC No. 201-245-8
- $(CH_3)_2C(C_6H_4OH)_2$ • FW 228.29

• Vapour pressure 0.86 hPa (190℃) • Spec. density 1.19 g/cm³ (25℃) • Flash point 227℃ • Solub. in H_2O (20℃) insoluble • pH value 6.4 • Melting point 155℃ • Bulk density 600 kg/cm³ • Boiling point 220℃(5 hPa) • Ignition temp. 510℃

• IMDG No Dangerous Good • HS Code 2907 23 00
• RTECS SL6300000 • Merck Index 10, 1296

Appearance ····· White ~ brown crystals, Powder, flakes. There is a strange odor.
Assay ····· Min 98.0%
Solubility in ethanol ····· To pass test
Melting point ····· Max 159.0 ℃
Water ····· Max 0.5%
Ignition residue (as Sulfate) ····· Max 0.05%
Phenol(C_6H_6O) ····· To pass test

Product No.	Packing	Price(₩)
1000	500g	8,800

Bitter almond oil → *go to Benzaldehyde*

Blanc fixe → *go to Barium Sulfate*

Boiling Stone — CP

비등석

Product No.	Packing	Price(₩)
1001	500g	13,800

Borax — Extra Pure

붕사, Sodium Tetraborate, Sodium biborate, Sodium borate
- CAS No. 1303-96-4 • EC No. 215-540-4
- $Na_2B_4O_7 \cdot 10H_2O$ • FW 381.36

• Vapour pressure 0.213 hPa (20℃) • Spec. density 1.72 g/cm³ (20℃) • Solub. in H_2O 51.4 g/l (20℃) • pH value 9.2 (47 g/l, H_2O, 20℃)(suspension) • Melting point 75℃ • Bulk density ~750 kg/cm³ • Boiling point 1575℃ (anhydrous)

• IMDG No Dangerous Good • HS Code 2840 19 00
• RTECS VZ2275000 • Merck Index 10, 8421

Appearance ····· White crystal or crystalline powder
Assay ····· 99.0~103.0%
Solubility in water ····· To pass test
Nitrate (NO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.002%
Calcium(Ca) ····· To pass test
Arsenic (As) ····· Max 5 ppm

Product No.	Packing	Price(₩)
943	500g	4,400
944	1kg	6,900
945	25kg	75,000

B

Boric Acid — Extra Pure

붕산

● CAS No. 10043-35-3 ● EC No. 233-139-2
● H_3BO_3 ● FW 61.831

● Vapour pressure 2.7 hPa (20℃) ● Spec. density 1.44 g/cm³ (20℃) ● Solub. in H_2O 50 g/l (20℃) ● pH value 3.8~4.8 (33 g/l, H_2O, 20℃) ● Melting point 185℃ (decomposition) ● Bulk density ~400-600 kg/cm³

● IMDG No Dangerous Good ● HS Code 2810 00 00
● RTECS ED455000 ● Merck Index 10, 1320

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.5%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Chloride (Cl) ····· Max 0.001%
Sulfate (SO_4) ····· Max 0.005%
Calcium(Ca) ····· Max 0.005%
Lead (Pb) ····· Max 0.002
Arsenic (As) ····· Max 5 ppm
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
1003	500g	7,000
1004	1kg	10,000
1005	25kg	87,500

Boric anhydride → *go to Boron trioxide*

Boron Nitride — Extra Pure

질화붕소

● CAS No. 10043-11-5 ● EC No. 233-136-6
● BN ● FW 24.82

● Spec. density 2.34 g/cm³ (20℃) ● Solub. in H_2O g/l (20℃)slightly soluble ● Melting point 2700~3000℃ ● Bulk density ~120 kg/cm³

● IMDG No Dangerous Good ● HS Code 2850 00 00
● Merck Index 10, 1332

Product No.	Packing	Price(₩)
1008	25g	30,000

Boron Trioxide — CP

삼산화붕소(무수붕산), Boric anhydride

● CAS No. 1303-86-2 ● EC No. 215-125-8
● B_2O_3 ● FW 69.64

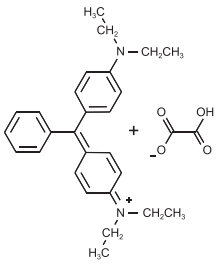
● Spec. density 2.46 g/cm³ (20℃) ● Solub. in H_2O 36 g/l (25℃) ● pH value ~4 (10 g/l, H_2O, 25℃) ● Melting point 450℃ ● Bulk density ~900-1100 kg/cm³ ● Boiling point 1860℃

● IMDG No Dangerous Good ● HS Code 2810 00 00
● RTECS ED7900000 ● Merck Index 10, 1321

Appearance ····· Clear, Colorless glass shape, small piece or white powder.
Assay ····· Min 85.0%
Solubility in water ····· To pass test
Sulfate (SO_4) ····· Max 0.04%
Heavy metals (as Pb) ····· Max 0.01%
Iron (Fe) ····· Max 0.01%

Product No.	Packing	Price(₩)
1010	1kg	17,500

Brilliant Green — Indicator



브릴리안트그린, Diamond green G, Solid green, Ethyl green

● CAS No. 633-03-4 ● EC No. 211-190-1
● $C_{27}H_{34}N_2O_4S$ ● FW 482.64

● Solub. in H_2O 100 g/l (20℃) ● pH value ~2.5 (10 g/l, H_2O, 25℃) ● Melting point 210℃ (decomposition) ● Bulk density ~500-600 kg/cm³

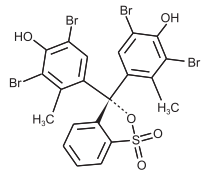
● IMDG NO UN 2811TOXIC SOLID, ORGANIC, N.O.S. (N,,-DIETHYLAMINOTRIPHENYLMETHYLIUMHYDROGENSULFATE), 6.1, Ⅲ ● HS Code 3204 13 00

Product No.	Packing	Price(₩)
1011	25g	16,300

N/10 - Bromine (0.05M) — Normal

Product No.	Packing	Price(₩)
1012	500㎖	9,400

Bromocresol Green — Indicator



브로모크레졸그린, 3,3',5,5'-Tetrabromo-m-cresol-sulfonphthalein, BCG

● CAS No. 76-60-8 ● EC No.200-972-8
● $C_{21}H_{14}Br_4O_5S$ ● FW 698.02

● Solub. in H_2O g/l (20℃) insoluble ● Melting point 217~218℃ ● Bulk density 350 kg/cm³

● IMDG No Dangerous Good ● HS Code 2934 99 00

Solubility in ethanol ····· To pass test
Solubility in NaOH ····· To pass test
Loss on drying(at.105℃, 2hr.) ····· Max 1.0
Ignition residue (as Sulfate) ····· Max 0.5
pH range ····· To pass test [(Yellow)3.8~5.4 (Blue)]

Product No.	Packing	Price(₩)
1013	25g	39,000

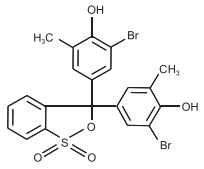
Bromocresol Green solution — Indicator solution

Product No.	Packing	Price(₩)
1014	500㎖	11,400

Bromocresol Green - Methyl Red solution — Indicator solution

Product No.	Packing	Price(₩)
1015	500㎖	19,500

Bromocresol Purple



브로모크레졸퍼플,
5',5''–Dibromo–o–cresolsulfonephthalein
● CAS No. 115–40–2 ● EC No. 204–087–8
● $C_{21}H_{16}Br_2O_5S$ ● FW 540.22

● Solub. in H_2O (20℃) Slightly soluble ● Melting point 242℃ ● Bulk density 515 kg/cm³

● IMDG No Dangerous Good ● HS Code 2934 99 00

Bromocresol Purple GR

Appearance ····· Slightly yellow – red Crystalline powder.
Solubility in ethanol ····· To pass test
Solubility in NaOH Solution ····· To pass test
Absorbance(5mg/l,pH 7.2) ····· Min 0.54
Loss on drying(at.105℃, 2hr.) ····· Max 1.0%
Ignition residue (as Sulfate) ····· Max 0.5%
pH range ····· (Yellow)5.2~6.8(Purple)

Product No.	Packing	Price(₩)
3993	25g	18,800

NEW Bromocresol Purple Indicator

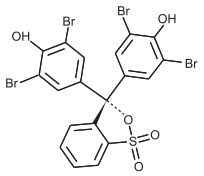
Appearance ····· Yellow ~ Red crystalline powderpowder.
Apperance of solution ····· To pass test
Loss on drying (105℃) ····· Max 1.0%
pH range ····· 5.2(Yellow)~6.8(purple)

Product No.	Packing	Price(₩)
4684	25g	27,000

Bromocresol Purple Solution Indicator Solution

Product No.	Packing	Price(₩)
1016	500 ㎖	11,300

Bromophenol Blue Normal



브로모페놀블루, 3,3',5,5'–Tetrabromophenolsul–fonphthalein, BPB
● CAS No. 115–39–9 ● EC No. 204–086–2
● $C_{19}H_{10}Br_4O_5S$ ● FW 669.97

● Solub. in H_2O g/l (20℃) almost insoluble ● Melting point 273℃(decomposition) ● Bulk density ~730 kg/cm³

● IMDG No Dangerous Good ● HS Code 2934 99 90

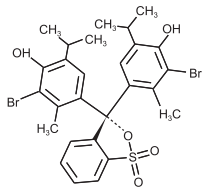
Appearance ····· Pale yellow~Scarlet crystalline powder.
Solubility in ethanol ····· To pass test
Solubility in NaOH Solution ····· To pass test
Absorbance(5mg/l,pH 8.0) ····· Min 0.48
Loss on drying(at.105℃, 2hr.) ····· Max 1.0%
Ignition residue (as Sulfate) ····· Max 0.5%
pH range ····· 3.0(Yellow)~4.6(Purple)

Product No.	Packing	Price(₩)
1017	25g	17,500

Bromophenol Blue solution Indicator solution

Product No.	Packing	Price(₩)
1018	500㎖	11,400

Bromothymol Blue Indicator



브로모티몰블루, 3',3''–Dibromothymolsulfonphtha–lein, BTB
● CAS No. 76–59–5 ● EC No. 200–971–2
● $C_{27}H_{28}Br_2O_5S$ ● FW 669.97

● Solub. in H_2O g/l (20℃) insoluble ● Bulk density ~450 kg/cm³

● IMDG No Dangerous Good ● HS Code 2934 99 00

Appearance ····· Pale yellow~Pale brown powder.
Solubility in ethanol ····· To pass test
Solubility in NaOH Solution ····· To pass test
Absorbance(5mg/l, pH 8.0) ····· Min 0.23
Loss on drying(at.105℃, 2hr.) ····· Max 1.0%
Ignition residue (as Sulfate) ····· Max 0.5%
pH range(yellow) 6.0–7.6(Blue) ····· To pass test

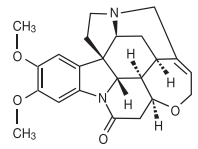
Product No.	Packing	Price(₩)
1019	25g	22,500

Bromothymol Blue solution Indicator solution

브로모티몰블루용액, B.T.B Solution

Product No.	Packing	Price(₩)
1020	500㎖	8,000

Brucine GR NEW



Chiral

부루신, 10,11–Dimethoxystrychnine
● CAS No. 357–57–3
● $C_{23}H_{26}N_2O_4$ ● FW 394.47

● IMDG UN1570 BRUCINE, 6.1, I ● HS Code 2939 99 00

Appearance ····· White~Yellowish crystalline powder.
Assay ····· Min 99.0%
Melting point ····· 175~180 ℃
Solubility in ethanol ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.1%
Sensitivity as micro reagent of nitrate ····· To pass test

Product No.	Packing	Price(₩)
5059	25g	75,000

40% BTMAH Methanol solution
→ *go to 40% Benzyl trimethyl ammonium Hydroxide Methanol solution*

Buffer Solution, Standard pH 2.00 Buffer

pH 2.00 표준완충액

Appearance (APHA) ····· To pass test
pH(25℃) ····· 1.98~2.02

Product No.	Packing	Price(₩)
1021	500㎖	5,000
5802	1 ℓ	10,000

Buffer Solution, Standard pH 3.00 Buffer

pH 3.00 표준완충액

Product No.	Packing	Price(₩)
1022	500㎖	5,000

B

Buffer Solution, Standard pH 4.01 Buffer

pH 4.01 표준완충액

Appearance (APHA) ····· To pass test
pH(25℃) ····· 3.99~4.03

Product No.	Packing	Price(₩)
1023	500㎖	5,000
1024	1 ℓ	8,800

Buffer Solution, Standard pH 4.6 Buffer

pH 4.6 표준완충액

Product No.	Packing	Price(₩)
1876	1 ℓ	8,800

Buffer Solution, Standard pH 5 Buffer

pH 5 표준완충액

Product No.	Packing	Price(₩)
4330	1 ℓ	8,800

Buffer Solution, Standard pH 6 Buffer

pH 6 표준완충액

Product No.	Packing	Price(₩)
4135	500㎖	5,000
4136	1 ℓ	8,800

Buffer Solution, Standard pH 6.86 Buffer

pH 6.86 표준완충액

Appearance (APHA) ····· To pass test
pH(25℃) ····· 6.84~6.88

Product No.	Packing	Price(₩)
1025	500㎖	5,000
1026	1 ℓ	8,800

Buffer Solution, Standard pH 7.00 Buffer

pH 7.00 표준완충액

Appearance (APHA) ····· To pass test
pH(25℃) ····· 6.98~7.02

Product No.	Packing	Price(₩)
1027	500㎖	5,000
1028	1 ℓ	8,800

Buffer Solution, Standard pH 9.18 Buffer

pH 9.18 표준완충액

Appearance (APHA) ····· To pass test
pH(25℃) ····· 9.15~9.21

Product No.	Packing	Price(₩)
1029	500㎖	5,000
1030	1 ℓ	8,800

Buffer Solution, Standard pH 10.00 Buffer

pH 10.00 표준완충액

Appearance (APHA) ····· To pass test
pH(25℃) ····· 9.98~10.02

Product No.	Packing	Price(₩)
1031	500㎖	5,000
1032	1 ℓ	8,800

Buffer Solution, Standard pH 11.00 Buffer

pH 11.00 표준완충액

Product No.	Packing	Price(₩)
3922	500㎖	6,300
3921	1 ℓ	9,400

Buffer Solution, Standard pH 12.00 Buffer

pH 12.00 표준완충액

Appearance (APHA) ····· To pass test
pH(25℃) ····· 11.95~12.05

Product No.	Packing	Price(₩)
1838	500㎖	6,300

Buffer Solution, Standard pH 13.00 Buffer

pH 13.00 표준완충액

Product No.	Packing	Price(₩)
3998	500㎖	6,900
3987	1 ℓ	11,000

Buffered Oxide Etchant 10:1 EL

Ammonium Fluoride ····· 33.5±1.0 wt%
Hydrofluoric Acid ····· 1.8±0.2 wt%
Lithium (Li) ····· Max 2.0 ppm
Sodium (Na) ····· Max 5.0 ppm
Magnesium (Mg) ····· Max 2.0 ppm
Aluminum (Al) ····· Max 2.0 ppm
Potassium (K) ····· Max 5.0 ppm
Calcium (Ca) ····· Max 2.0 ppm
Chromium (Cr) ····· Max 2.0 ppm
Manganese (Mn) ····· Max 2.0 ppm
Iron (Fe) ····· Max 5.0 ppm
Cobalt (Co) ····· Max 2.0 ppm
Nickel (Ni) ····· Max 2.0 ppm
Copper (Cu) ····· Max 2.0 ppm
Zinc (Zn) ····· Max 2.0 ppm
Arsenic (As) ····· Max 2.0 ppm
Strontium(Sr) ····· Max 2.0 ppm
Cadmium (Cd) ····· Max 2.0 ppm
Barium (Ba) ····· Max 2.0 ppm
Lead (Pb) ····· Max 2.0 ppm

Product No.	Packing	Price(₩)
1675	3.8 ℓ	47,500

Buffered Oxide Etchant 6:1 EL

Hydrofluoric Acid ····· 24.0±0.2 wt%
Ammonium Fluoride ····· 4.0±1.0 wt%
Lithium (Li) ····· Max 2.0 ppm
Sodium (Na) ····· Max 2.0 ppm
Magnesium (Mg) ····· Max 2.0 ppm
Aluminum (Al) ····· Max 2.0 ppm
Potassium (K) ····· Max 2.0 ppm
Calcium (Ca) ····· Max 2.0 ppm
Chromium (Cr) ····· Max 2.0 ppm
Manganese (Mn) ····· Max 2.0 ppm
Iron (Fe) ····· Max 2.0 ppm
Cobalt (Co) ····· Max 2.0 ppm
Nickel (Ni) ····· Max 2.0 ppm
Copper (Cu) ····· Max 2.0 ppm
Zinc (Zn) ····· Max 2.0 ppm

Arsenic (As) ····· Max 2.0 ppm
Strontium(Sr) ····· Max 2.0 ppm
Cadmium (Cd) ····· Max 2.0 ppm
Barium (Ba) ····· Max 2.0 ppm
Lead (Pb) ····· Max 2.0 ppm

Product No.	Packing	Price(₩)
1659	3.8 ℓ	47,500
1660	20kg	52,500

Butanedioic acid → *go to Succinic Acid*

1,4-Butanediol — Extra Pure

1,4-뷰테인디올, 1,4-Butylene glycol
● CAS No. 110-63-4 ● EC No. 203-786-5
● $HO(CH_2)_4OH$ ● FW 90.12

● Vapour pressure < 1 hPa (20℃) ● Spec. density 1.02 g/cm³ (20℃) ● Explosive limit 2.4~15.3 Vol% ● Flash point 134℃ c. c.(DIN51758) ● Solub. in H_2O (20℃) soluble ● pH value 7~8 (500 g/l, H_2O, 20℃) ● Melting point 19.5~20.0℃ ● Boiling point 230℃ ● Ignition temp. 385℃

● IMDG No Dangerous Good ● HS Code 2905 39 00
● 4류 제3석유류(비수용성액체) 4000ℓ

Appearance ····· Colorless, odorless, viscous, hygroscopic liquid.
Density (n25D) ····· Max 1.02 g/ml
Melting point ····· Max 20.0℃
Water ····· Max 0.05%
Assay(by GC) ····· Max. 99.5%

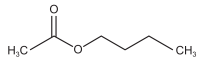
Product No.	Packing	Price(₩)
1033	500g	10,000
2862	18 ℓ	156,300

1-Butanol → *go to n-Butyl Alcohol*

2-Butanol → *go to sec-Butyl Alcohol*

2-Butoxyethanol → *go to Ethylene Glycol monobutyl ether*

n-Butyl Acetate



아세트산뷰틸, Acetic acid n-butyl ester
● CAS No. 123-86-4 ● EC No. 204-658-1
● $CH_3COOCH_2CH_2CH_2CH_3$ ● FW 116.16

● Vapour pressure 13 hPa (20℃) ● Spec. density 0.88 g/cm³ (20℃) ● Explosive limit 1.4~7.5 Vol% ● Flash point 25℃ c. c.● Solub. in H_2O 7 (20℃) ● Melting point −76℃ ● Boiling point 124~127℃(1013 hPa) ● Ignition temp. 370℃

● IMDG UN1123 BUTYL ACETATES, 3, Ⅲ ● HS Code 2915 33 00
● 4류 제2석유류(비수용성액체) 1000ℓ

n-Butyl Acetate — EL

Assay ····· Min 99.5%
Color ····· Max 10 APHA
Residue after evaporation ····· Max 10 ppm
Acidity (as CH_3COOH) ····· Max 30 ppm
Water ····· Max 0.05%
Phosphate (PO_4) ····· Max 0.5 ppm
Aluminum (Al) ····· Max 20 ppb
Arsenic (As) ····· Max 10 ppb
Barium (Ba) ····· Max 10 ppb
Boron (B) ····· Max 20 ppb
Cadmium (Cd) ····· Max 50 ppm
Calcium (Ca) ····· Max 20 ppb
Chromium (Cr) ····· Max 20 ppb
Cobalt (Co) ····· Max 20 ppb
Copper (Cu) ····· Max 50 ppb
Gallium (Ga) ····· Max 50 ppb
Germanium (Ge) ····· Max 20 ppb
Gold (Au) ····· Max 20 ppb
Iron (Fe) ····· Max 20 ppb
Lead (Pb) ····· Max 50 ppb
Lithium (Li) ····· Max 20 ppb
Magnesium (Mg) ····· Max 20 ppb
Manganese (Mn) ····· Max 10 ppb
Nickel (Ni) ····· Max 100 ppb
Potassium (K) ····· Max 100 ppb
Silicon (Si) ····· Max 20 ppb
Silver (Ag) ····· Max 100 ppb
Sodium (Na) ····· Max 10 ppb
Strontium(Sr) ····· Max 100 ppb
Tin(Sn) ····· Max 50 ppb
Titanium(Ti) ····· Max 10 ppb
Zinc (Zn) ····· Max 30 ppb
Particle Count (0.5 micron and above) ····· Max 100 pcs/ml

Product No.	Packing	Price(₩)
1039	3.8 ℓ	25,000

n-Butyl Acetate — Extra Pure

Appearance ····· Colorless, volatile liquid. Unusual smell.
Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 0.878~0.883 g/ml
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.01%
Acidity (as CH_3COOH) ····· Max 0.006%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
1839	500㎖	5,000
1036	1 ℓ	8,800
1037	18 ℓ	63,800

n-Butyl Acetate — GR

Density (20℃) ····· 0.878~0.883 g/ml
Refractive index (n 20 D) ····· 1.392~1.397
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.002%
Free acid (as CH_3COOH) ····· Max 0.003%
Substances darkened by sulfuric acid ····· To pass test
Assay ····· 99.0 ~ 100.0%

Product No.	Packing	Price(₩)
1035	1 ℓ	8,800

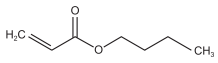
n-Butyl Acetate — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
254 nm ····· Max 1.00
260 nm ····· Max 0.20
275 nm ····· Max 0.04
300 nm ····· Max 0.02
320 nm ····· Max 0.01
UV Cutoff ····· Max 254 nm
Assay (by GC) ····· Min 99.5%
Color (APHA) ····· Max 10
Water ····· Max 0.05%
Residue after evaporation ····· Max 5 ppm
Titrable acid ····· Max 0.0016 mEq/g
Substances darkened by sulfuric acid ····· To pass test
n-Butyl Alcohol (C_4H_9OH) ····· Max 0.2%

Product No.	Packing	Price(₩)
1038	4 ℓ	50,000

B

Butyl Acrylate GR



아크릴산뷰틸, Acrylic acid butyl ester
● CAS No. 141-32-2 ● EC No. 204-658-1
● $H_2C=CHCOO(CH_2)_3CH_3$ ● FW 128.17

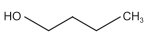
● Vapour pressure 5.3 hPa (20℃) ● Spec. density 0.90 g/cm³ (20℃) ● Explosive limit 1.5~2.1 Vol% ● Flash point 37℃ c. c.● Solub. in H_2O 2 (20℃) ● Melting point −65℃ ● Boiling point 147~148℃ ● Ignition temp. 297℃

● IMDG UN2348 BUTYL ACrylATES, stavilized 3, Ⅲ ● HS Code 2916 12 00
● 4류 제2석유류(비수용성액체) 1000ℓ ● Merck Index 10, 1512

Assay (by GC)	Max 99.5%
Density (20℃)	0.897~0.902 g/ml
Water	Max 0.1%
Refractive index (n20D)	1.417~1.420
Acidity (as CH_3COOH)	Max 0.005%

Product No.	Packing	Price(₩)
1041	500㎖	8,000
1665	18 ℓ	162,000

n-Butyl Alcohol



뷰틸알콜, 1-Butanol
● CAS No. 71-36-3 ● EC No. 200-751-6
● $CH_3(CH_2)_2CH_2OH$ ● FW 74.12

● Vapour pressure 6.7 hPa (20℃)(calculated) ● Spec. density 0.81 g/cm³ (20℃) ● Explosive limit 1.4~11.3 Vol% ● Flash point 34℃ c. c.(DIN51755)● Solub. in H_2O 77 (20℃) ● pH value 7 (70 g/l, H_2O, 20℃) ● Melting point −89℃ ● Boiling point 116~118℃(1013 hPa) ● Ignition temp. 340℃(DIN51794)

● IMDG No UN1120 Butanols, 3, Ⅲ ● HS Code 2905 13 00
● RTECS EO1400000 ● 4류 제2석유류(비수용성액체) 1000ℓ ● Merck Index 10, 1513

n-Butyl Alcohol Extra Pure

Appearance	Clear & Peculiar smell.
Assay (by GC)	Min 99.0%
Solubility in water	To pass test
Solubility in ethanol	To pass test
Density (20℃)	0.808~0.812 g/ml
Water	Max 0.3%
Residue after evaporation	Max 0.004%
Acidity (as CH_3COOH)	Max 0.004%
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
1044	500㎖	5,000
1045	1 ℓ	8,800
1046	18 ℓ	67,500
1844	200 ℓ	Call

n-Butyl Alcohol GR

Appearance	Clear & Peculiar smell.
Assay (by GC)	Min 99.0%
Solubility in water	To pass test
Solubility in ethanol	To pass test
Density (20℃)	0.808~0.812 g/ml
Refractive index (at 20℃)	1.398 ~ 1.400
Water	Max 0.2%
Residue after evaporation	Max 0.002%
Acidity (as CH_3COOH)	Max 0.003%
Fluorescene test	To pass test
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
1043	1 ℓ	9,400
3875	2.5 ℓ	15,000
3611	3.8 ℓ	22,500

n-Butyl Alcohol HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry

Mximum UV Absorbance	
215 nm	Max 1.00
220 nm	Max 0.50
230 nm	Max 0.20
254 nm	Max 0.025
UV Cutoff	Max 215 nm
Assay (by GC)	Min 99.5%
Color (APHA)	Max 10
Water	Max 0.1%
Residue after evaporation	Max 5 ppm
Titratable Acid	Max 0.0008 mEq/g
Carbonyl compounds (as butyraldehyde)	Max 0.01%
Butyl ether	Max 0.2%

Product No.	Packing	Price(₩)
1047	4 ℓ	33,800

n-Butyl Alcohol PESTICIDE

Extraction-Concentration Suitability

ECD Detectable residue (as Heptachlor epoxide)	Max 10 ppt
Assay (by GC)	Min 99.5%
Color (APHA)	Max 10
Water	Max 0.1%
Residue after Evaporation	Max 5 ppm

Product No.	Packing	Price(₩)
1877	4 ℓ	43,800

n-Butyl Alcohol ACS

Assay	Min 99.4%
Color(APHA)	Max 10
Residue after evaporation	Max 0.005%
Titrable acid	Max 0.0008 meq/g
Carbonyl compounds(as butyraldehyde)	Max 0.01%
Water(H_2O)	Max 0.1%
Butyl ether($C_8H_{18}O$)	Max 0.2%

Product No.	Packing	Price(₩)
3390	4 ℓ	25,000

sec-Butyl Alcohol

sec-뷰틸알콜, 2-Butanol
● CAS No. 78-92-2 ● EC No. 201-158-5
● $C_2H_5CH(OH)CH_3$ ● FW 74.12

● Vapour pressure 16.5hPa (20℃) ● Spec. density 0.81 g/cm³(20℃) ● Explosive limits 1.4 – 9.8 vol% ● Flash point 24℃ (DIN 51755) ● Solub. in H_2O 125 g/l (20℃) ● pH value (20℃)neutral ● Saturation conc. 52g/m³ (20℃) ● Melting point −115℃ ● Boiling point 99 – 102℃ (1013hPa) ● Ignition temp. 390℃ (DIN 51794)

● IMDG UN 1120 BUTANOLS, 3, III ● HS Code 2905 14 90
● 4류 제2석유류 (비수용성액체) 1000ℓ ● Merck Index 10, 1514

sec-Butyl Alcohol Extra Pure

Appearance	Colorless liquid. Unusual smell.
Assay	Min 99.0%
Solubility in water	To pass test
Density (20℃)	0.806 ~ 0.808g/ml

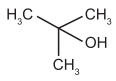
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.004%
Acidity (as CH_3COOH) ····· Max 0.004%

Product No.	Packing	Price(₩)
1048	500㎖	7,000
5259	18 ℓ	131,300

sec-Butyl Alcohol GR

Product No.	Packing	Price(₩)
3832	2.5 ℓ	Call

tert-Butyl Alcohol



tert-Butanol
● CAS No. 75-65-0 ● EC No. 200-889-7
● $(CH_3)3COH$ ● FW 74.12

● Vapour pressure 40.7hPa (20℃) ● Spec. density 0.78g/cm³ (20℃) ● Explosive limits 2.3 – 8.0 Vol% ● Flash point 14℃ c.c. ● Solub. in H_2O (20℃) soluble ● pH Value (20℃)neutral ● Saturation conc. 122g/m³ (20℃) ● Melting point 24 – 25℃ ● Boiling point 81 – 83℃ (1013 hPa) ● Ignition temp. 490℃ (DIN 51794)

● IMDG UN 1120 BUTANOLS, 3, II ● HS Code 2905 14 10
● 4류 제1석유류 (수용성액체 400ℓ) ● Merck Index 10, 1515

tert-Butyl Alcohol Extra Pure

Appearance ····· Colorless liquid. Unusual smell.
Identification ····· To pass test
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.003%
Acidity (as CH_3COOH) ····· Max 0.003%

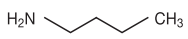
Product No.	Packing	Price(₩)
1050	500㎖	8,800
1051	18 ℓ	93,800

tert-Butyl Alcohol GR

Product No.	Packing	Price(₩)
3841	2.5 ℓ	31,300

NEW

n-Butylamine Extra Pure



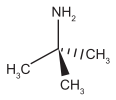
n-부틸아민, 1-Aminobutane
● CAS No. 109-73-9 ● EC No. 203-699-2
● $C_4H_{11}N$ ● FW 73.14

● Spec. density 0.74 g/cm³ (20 ℃) ● Solub. in H_2O (20 ℃) soluble ● Vapor pressure 93 hPa (20 ℃) ● pH value 7 – 8 (32 g/l, H_2O, 20 ℃) ● Explosive limit 1.5 – 9.8 %(V) ● Flash point -12℃ ● Melting point -50 ℃ ● Bulk density 800 kg/m³ ● Boiling point 76 – 78 ℃ ● Ignition temp. 290 ℃(DIN 51794)

● IMDG UN 1125 N-BUTYLAMINE, 3 (8), II ● HS Code 2921 19 99
● RTECS EO2975000 ● Merck Index 10, 1516

Product No.	Packing	Price(₩)
5122	1 ℓ	30,000

tert-Butylamine Extra Pure



tert-뷰틸아민, 2-Amino-2-methylpropane
● CAS No. 75-64-9 ● EC No. 200-888-1
● $(CH_3)_3CNH_2$ ● FW 73.14

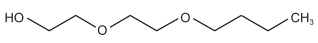
● Vapour pressure 300hPa (20℃) ● Spec. density 0.69g/cm³ (20℃) ● Explosive limits 1.5 – 9.2 Vol% ● Flash point -38℃ (DIN 51755) ● Solub. in H_2O (20℃) freely soluble ● pH Value ~ 12 (100g/l, H_2O, 20℃) ● Melting point -72℃ ● Boiling point 44℃ ● Ignition temp. 375℃ (DIN 51794)

● IMDG UN 2734 AMINES, LIQUID, COROSIVE, FLAMMABLE, N.O.S. (TERT-BUTYLAMINE), 8(3), I ● HS Code 2921 19 80
● 제4류 제1석유류(수용성액체) 400ℓ ● Merck Index 10, 1518

Assay(by GC) ····· Min 99.0%
Water ····· Max 1.0%

Product No.	Packing	Price(₩)
1643	1kg	16,300

Butyl Carbitol Extra Pure



뷰틸캐비톨, Diethylene glycol monobutyl ether, 2-(2-Butoxyethoxy)ethanol
● CAS No. 112-34-5 ● EC No. 203-961-6
● $CH_3(CH_2)_3OCH_2CH_2OCH_2CH_2OH$ ● FW 162.23

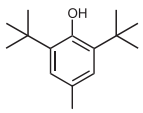
● Vapour pressure 0.1 hPa (20℃) ● Spec. density 0.95 g/cm³ (20℃) ● Explosive limit 0.7~5.3 Vol% ● Flash point 105℃ c. c.(DIN51758) ● Solub. in H_2O (25℃) freely soluble ● pH value (20℃) neutural ● Melting point 68℃ ● Boiling point 226~234℃(1013 hPa) ● Ignition temp. 225℃(DIN51794)

● IMDG No Dangerous Good ● HS Code 2909 43 00
● 4류 제3석유류(수용성액체) 400ℓ ● Merck Index 10, 1530

Appearance ····· Hygroscopic, Colorless liquid.
Assay ····· Min 98.0%
Density (20℃) ····· 0.953~0.954 g/ml
Water ····· Max 0.5%

Product No.	Packing	Price(₩)
1055	500㎖	11,300
1056	18 ℓ	125,000

Butylated Hydroxy Toluene GR



BHT, 2,6-bis(1,1-dimethylethyl)-4-methylphenol
● CAS No. 128-37-0 ● EC No.204-881-4
● $C_{15}H_{24}O$ ● FW 220.36

● Vapour pressure 0.02 hPa (20℃) ● Spec. density 1.05 g/cm³ (20℃) ● Flash point 127℃ c.c. (DIN51758) ● Solub. in H_2O 0.001 g/l (25℃) ● Melting point 69 ~ 70℃ ● Bulk density 450 kg/cm³ ● Boiling point 265℃ (1013 hPa) ● Ignition temp. 345℃ (DIN51794)

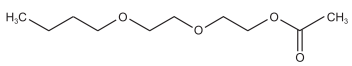
● IMDG UN3077 ● HS Code 2907 19 00

Appearance ····· White crystal or white crystalline powder.
Melting point ····· 69.0~72.0 ℃
Solubility in ethanol ····· To pass test
Sufate (SO_4) ····· Max 0.0004%
Heavy metals ····· Max 10 ppm
Residue on ignition ····· Max 0.02%
Arsenic ····· Max 4 ppm

Product No.	Packing	Price(₩)
2900	500g	17,000

B

Butyl Carbitol Acetate — Extra Pure



뷰틸캐비톨 아세테이드, Diethylene glycol monobutyl ether acetate
● CAS No. 124-17-4 ● EC No. 204-685-9
● $CH_3(CH_2)_3(OCH_2CH_2)_2OOCCH_3$ ● FW 204.27

● Vapour pressure < 0.01 hPa (20℃) ● Spec. density 0.98 g/cm³ (20℃) ● Explosive limit 1.0~5.3 Vol% ● Flash point 102℃ c. c. ● Solub. in H_2O 64 g/l (20℃)
● pH value 3~4 (50℃ g/l, H_2O, 20℃) neutural ● Melting point −32℃ ● Boiling point 244~250℃(1013 hPa) ● Ignition temp. 290℃

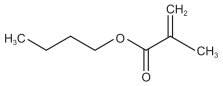
● IMDG No Dangerous Good ● HS Code 2915 39 00
● 4류 제3석유류(비수용성액체) 2000ℓ

Appearance ····· Colorless to yellow liquid. A good smell.
Assay (by GC) ····· Min 98.0%
Density (20℃) ····· 0.975~0.979 g/ml
Refractive index (n20D) ····· 1.4210~1.4240
Water ····· Max 0.1%
Acidity ····· Max 0.02%

Product No.	Packing	Price(₩)
1061	500㎖	8,800

Butyl cellosolve → *go to Ethylene Glycol monobutyl ether*

Butyl Methacrylate, monomer — GR



메타아크릴산뷰틸, Butyl-2-methylpropenoate, Methacrylic acid butyl ester
● CAS No. 97-88-1 ● EC No.202-615-1
● $CH_2=C(CH_3)COO(CH_2)_3CH_3$ ● FW 142.20

● Vapour pressure 2.7 hPa (20℃) ● Spec. density 0.89 g/cm³ (20℃) ● Explosive limit 2.00~8.00 Vol% ● Flash point 49℃ c. c.(DIN51755) ● Solub. in H_2O 0.8 (25℃) ● Melting point −75℃
● Boiling point 163℃(1013 hPa) ● Ignition temp. 310℃(DIN51794)

● IMDG UN2227 N-BUTYLMETHACRYLAT, STABILISIERT, 3, Ⅲ
● HS Code 2916 14 00 ● 4류 제2석유류(비수용성액체) 1000ℓ

Color (APHA) ····· Max 10
Assay (by GC) ····· Min 99.5%
Water ····· Max 0.03%
Density (20℃) ····· 0.890~0.900 g/ml

Product No.	Packing	Price(₩)
1068	500g	11,300

tert-Butyl methyl ether → *go to Methyl tert-Butyl Ether*

Butyl octadecanoate → *go to Butyl Stearate*

Butyl Paraben — Extra Pure

뷰틸파라벤, Butyl 4-hydroxybenzoate
● CAS No. 94-26-8
● $HOC_6H_4COO(CH_2)_3CH_3$ ● FW 194.23

● Melting point 68~69℃

Product No.	Packing	Price(₩)
1065	25g	5,000
1066	500g	26,000

Butyl Stearate — Extra Pure

스테아린산뷰틸, Butyl Octadecanoate
● CAS No. 123-95-5
● $CH_3(CH_2)_{16}COO(CH_2)_3CH_3$ ● FW 340.59

● Spec. density 0.86 g/cm³ (20℃) ● Melting point 21℃ ● Boiling point 343℃

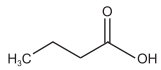
Product No.	Packing	Price(₩)
1879	25g	6,000

Butyl-4-hydroxybenzoate → *go to Butyl Paraben*

N-Butyl-1-butanamine → *go to Dibutylamine*

1,4-Butylene glycol → *go to 1,4-Butanediol*

Butyric Acid — Extra Pure



낙산
● CAS No. 107-92-6 ● EC No. 203-532-3
● $CH_3CH_2CH_2COOH$ ● FW 88.11

● Vapour pressure 0.56 hPa (20℃) ● Spec. density 0.96 g/cm³ (20℃) ● Explosive limit 2~12.3 Vol%
● Flash point 69℃ (DIN51758) ● Solub. in H_2O (20℃) soluble ● pH value 2.5 (100 g/l, H_2O, 20℃) ● Melting point −8~−5℃ ● Boiling point 162~165℃ ● Ignition temp. 425℃(DIN51794)

● IMDG UN2820 butyric acid, 8, Ⅲ ● HS Code 2915 60 00
● 4류 제3석유류(수용성액체) 4000ℓ ● Merck Index 10, 1566

Appearance ····· Colorless, transparent liquid, characteristic irritative odor.
Specific gravity (at 20/20℃) ····· 0.958~0.961 g/ml
Refractive index (at 20℃) ····· 1.3997~1.400
Sufate (SO_4) ····· To pass test
Heavy metals (as Pd) ····· Max 0.001%
Assay ····· Min 98.0%

Product No.	Packing	Price(₩)
1071	500㎖	11,300
3846	1ℓ	18,000

gamma-Butyrolactone EL

GBL

- CAS No. 96-48-0 • EC No. 202-509-5
- $C_4H_6O_2$ • FW 86.09

- Vapour pressure 0.4 hPa(20℃) • Spec. density 1.13g/cm³(20℃) • Explosive limit 2.7-15.6 Vol% • Flash point 100-101℃(DIN 51758) • Solub.in H_2O (20℃) soluble • Melting point -44℃ • Boiling point 204-206℃ • Ignition temp. 455℃(DIN 51794)

- IMDG No Dangerous Good
- HS Code 2932 29 60 • 4류 제3석유류(수용성액체)400ℓ

- Merck Index 10, 1569

Assay (by GC)	Min 99.9%
Water	Max 0.05%
Acidity (as butyric acid)	Max 0.03%
Color (APHA)	Max 10
Chloride (Cl)	Max 0.3ppm
Sulfate (SO_4)	Max 1ppm
Nitrate (NO_3)	Max 1ppm
Barium (Ba)	Max 50ppb
Copper (Cu)	Max 50ppb
Iron (Fe)	Max 50ppb
Lead (Pb)	Max 50ppb
Potassium (K)	Max 500ppb
Sodium (Na)	Max 500ppb
Particle Count (0.5 micron and above)	Max 100pcs/ml

Product No.	Packing	Price(₩)
3025	3.8ℓ	68,800

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

C

Alphabetical list Numbers

List of C

Product	Page
Cadmium Acetate dihydrate	92
Cadmium Carbonate	92
Cadmium Nitrate tetrahydrate	92
Cadmium Oxide	92
Cadmium Sulfate hydrate	92
Caesium	92
Caffeine anhydrous	92
Calcium Acetate monohydrate	92
Calcium Carbonate heavy	92
Calcium Chloride (for drying)	93
Calcium Chloride anhydrous	93
Calcium Chloride dihydrate	93
Calcium Citrate tetrahydrate	93
Calcium dihydrogen phosphate monohydrate	93
Calcium Fluoride	93
Calcium Gluconate	94
Calcium Glycerophosphate	94
Calcium Hydride	94
Calcium hydrogen phosphate dihydrate	94
Calcium Hydroxide	94
Calcium Hypochlorite	94
Calcium Hypophosphite	94
Calcium Lactate	94
Calcium Nitrate tetrahydrate	95
Calcium octadecanoate	95
Calcium Oxide	95
Calcium Pantothenate	95
tri-Calcium phosphate	95
Calcium Phosphate dibasic dihydrate	95
Calcium Phosphate monobasic	95
Calcium Phosphate tribasic	96
Calcium Stearate	96
Calcium Sulfate Calcined	96
Calcium(II) citrate	96
Calcium sulfate dihydrate	96
DL-Camphor	96
Canada Balsam	96
n-Caprylic Acid	97
Carbamide	97
Carbon disulfide	97
Carbonic acid strontium salt	97
Carboxymethyl cellulose calcium salt	97
Carboxymethyl cellulose sodium Salt	97
Carmine	97
Caseine from Milk	97
Castor Oil	97
Cedar Oil	97
Celite 545	97
Ceric Sulfate	98

Product	Page
Cerium(Ⅲ) Nitrate hexahydrate	98
Cerium(Ⅳ) sulphate	98
Cesium Chloride	98
Cetyl Alcohol	98
N-Cetyl-N,N,N Trimethyl Ammonium Bromide	98
Charcoal activated	98
Chloramine-T trihydrate	98
Chlorinated lime	98
Chloro calcium	98
Chloroacetic acid	98
2-Chloroethanol	98
Chloroform	98
1-Chloro-4-Nitrobenzene	100
4-Chlorophenol	100
p-Chlorophenol	100
Chlorophenol Red	100
N-Chlorosuccinimide	100
α-Chlorotoluene	100
Cholesterol	100
Choline Chloride	100
Chromium(Ⅲ) Chloride, hexahydrate	101
Chromium metal Powder	101
Chromium(Ⅲ) Nitrate nonahydrate	101
Chromium(Ⅲ) Oxide	101
Chromium(VI) oxide	101
Chromium trioxide	101
Chromotropic Acid Disodium salt	101
CI 11020	101
CI 13020	101
CI 13025	101
CI 14270	101
CI 14645	101
CI 22120	101
CI 26100	101
CI 42000	101
CI 42510	101
CI 42535	101
CI 42555	101
CI 45380	101
CI 50040	101
CI 52015	102
CI 73015	102
Citric Acid 12%	102
Citric Acid 50%	102
Citric Acid anhydrous	102
Citric Acid monohydrate	102
Clay Acid	102
Clay Activated	102
CMC Ca	102

Product	Page
CMC Na	102
Cobalt Acetate tetrahydrate	103
Cobalt Carbonate basic	103
Cobalt Chloride hexahydrate	103
Cobalt Nitrate hexahydrate	103
Cobalt Sulfate heptahydrate	103
Cobalt tetra oxide	103
Cobalt(II) acetate tetrahydrate	103
Cobalt(II) chloride hexahydrate	103
Cobalt(II) Nitrate hexahydrate	103
Cobalt(II) Sulfate heptahydrate	103
Cobalt(II,III) Oxide	104
Congo Red	104
Congo Red solution	104
Copper Powder	104
Copper (I) Chloride	104
Copper (I) Cyanide	104
Copper foil (0.1mm approx.)	104
Copper(II) hydroxide carbonate	104
Copper(I) Iodide	105
Copper(I) Oxide	105
Copper(I) Thiocyanate	105
Copper(II) Acetate monohydrate	105
Copper(II) Carbonate Basic	105
Copper(II) Chloride dihydrate	105
Copper(II) Diammonium Chloride dihydrate	105
Copper(II) Nitrate trihydrate	106
Copper(II) Oxide	106
Copper(II) Sulfate anhydrous	106
Copper(II) Sulfate Pentahydrate	106
Creatine Monohydrate	106
Creatinine	106
m-Cresol	106
m-Cresol Purple	107
m-Cresol Purple solution	107
Cresol Red	107
o-Cresolsulfophthalein	107
Cromic oxide	107
18-Crown-6-Ether	107
Cryolite	107
Crystal violet Acentic Acid Solution	107
CTMAB	107
Cupric oxide	107
Cupric acetate monohydrate	107
Cupric ammonium chloride dihydrate	107
Cupric chloride dihydrate	107
Cupric nitrate trihydrate	107
Cupric sulfate pentahydrate	107
Cuprous Chloride	107

Product	Page
Cuprous Cyanide	107
Cuprous iodide	107
Cuprous Oxide	107
Cuprous thiocyanate	107
Cyanoguanidine	107
Cyclohexane	108
Cyclohexanone	108
Cyclohexatriene	108
Cyclohexylamine	108
Cyclohexylmethane	109
L-Cysteine Hydrochloride monohydrate	109

C

Cadmium Acetate dihydrate — GR / AR

NEW

카드뮴 아세트산 2수화물

- CAS No. 5743-04-4
- $(CH_3COO)_2Cd \cdot 2H_2O$ • FW 266.52

Appearance	White crystalline powder.
Assay	Min 97.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.002%
Sulfate (SO_4)	Max 0.005%
Calcium (Ca)	Max 0.005%
Sodium (Na)	Max 0.002%
Heavy metals (as Pb)	Max 0.005%
Copper (Cu)	Max 0.002%
Iron (Fe)	Max 0.001%
Zinc (Zn)	Max 0.05%

Product No.	Packing	Price(₩)
4788	500g	75,000

Cadmium Carbonate — Extra Pure

NEW

탄산카드뮴

- CAS No. 513-78-0
- $CdCO_3$ • FW 172.41

- IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, Ⅲ • HS Code 2836 99 17

Product No.	Packing	Price(₩)
5123	500g	30,000

Cadmium Nitrate, tetrahydrate — Extra Pure

질산카드뮴 사수화물

- CAS No. 10022-68-1
- $Cd(NO_3)_2 \cdot 4H_2O$ • FW 308.47

- Spec. density 2.46 g/cm³(20℃) • Melting point 59℃ • Boiling point (decomposition)

Product No.	Packing	Price(₩)
1078	500g	18,000

Cadmium Oxide — CP

산화카드뮴

- CAS No. 1306-19-0 • EC No. 215-146-2
- CdO • FW 128.41

- Spec. density 6.95 g/cm³(20℃) • Solub. in H_2O (20℃) almost insoluble • pH value ~5-8 (10 g/l, H_2O, 20℃) • Melting point < 1426℃ • Boiling point 1559℃(sublimed)

- IMDG UN2570 CADMIUM COMPOUND, 6.1, Ⅲ, Marine Pollutant: PP
- HS Code 2825 90 00 • RTECS EV1925000 • Merck Index 10, 1593

Product No.	Packing	Price(₩)
1079	500g	40,000

Cadmium Sulfate, hydrate — Extra Pure

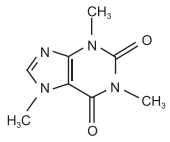
황산카드뮴

- CAS No. 15244-35-6
- $CdSO_4 \cdot nH_2O$ • FW 208.46(anh.)

Product No.	Packing	Price(₩)
1881	500g	33,000

Caesium → *go to Cesium Chloride*

Caffein anhydrous — Extra Pure



카페인, 8-Methyltheobromine, 1,3,7-Trimethylxanthine, 3,7-Dihydro-1,3,7-trimethyl-1H-purine-2,6-dione

- CAS No. 58-08-2 • EC No. 200-362-1
- $C_8H_{10}N_4O_2$ • FW 194.19

- Vapour pressure 20 hPa (80℃) • Spec. density 1.23 g/cm³ (18℃) • Solub. in H_2O 20 g/l (20℃) • pH value 5.5~6.5 (10 g/l, H_2O, 20℃) • Melting point 235~239℃ • Bulk density ~220 kg/cm³ • Ignition temp. > 600℃ (DIN51794)

- IMDG No UN1544 ALKALOID SALTS, SOLID, N.O.S. (CAFFEINE), 6.1, Ⅲ
- HS Code 2939 30 00 • Merck Index 10, 1606

Melting point	235.0~238.0℃
Chloride (Cl)	Max 0.011%
Sulfate(SO_4)	Max 0.024%
Heavy metals (as Pb)	Max 0.001%
Loss on drying	Max 0.5%
Residue after evaporation(SO_4)	Max 0.1%
Assay	Min 98.5%

Product No.	Packing	Price(₩)
1081	25g	6,500
1082	500g	35,000

Calcium Acetate, monohydrate — Extra Pure

아세트산칼슘

- CAS No. 5743-26-0
- $Ca(CH_3COO)_2 \cdot H_2O$ • FW 176.18

- Spec. density 1.5 g/cm³ (20℃) • Melting point 150℃ • Boiling point decomposition

Appearance	White crystal or crystalline powder.
Solubility in water	To pass test
pH(5%)	6.5~8.5
Chloride (Cl)	Max 0.005%
Sulfate (SO_4)	Max 0.01%
Nitrate (NO_3)	To pass test
Phosphate (PO_4)	Max 0.002%
Barium (Ba)	To pass test
Lead (Pb)	Max 0.003%
Iron (Fe)	Max 0.002%
Assay	Min 98.0%

Product No.	Packing	Price(₩)
1083	500g	9,000

Calcium Carbonate, heavy — Extra Pure

탄산칼슘

- CAS No. 471-34-1 • EC No. 207-439-9
- $CaCO_3$ • FW 100.09

- Spec. density 2.93 g/cm³ (20℃) • Solub. in H_2O 0.014 g/l (20℃) • pH value

9.5~10.5 (100 g/l, H_2O, 20℃)(slurry) ● Melting point 825℃ (decomposition) ● Bulk density ~400-700 kg/cm^3

● IMDG No Dangerous Good ● HS Code 2836 50 00
● RTECS FF9335000

Appearance ····· White powder.
Assay (after dried) ····· Min 98.5%
Solubility in dil. HCl ····· To pass test
Loss on drying(at.105℃, 2hr.) ····· Max 1.0%
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.005%
Barium (Ba) ····· Max 0.005%
Heavy metals (as Pb) ····· Max 0.002%
Arsenic (As) ····· Max 5 ppm
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
1088	500g	5,000
1917	25kg	43,800

Calcium Chloride (for drying) Extra Pure

염화칼슘(건조용), Chloro calcium
● CAS No. 10043-52-4 ● EC No. 233-140-8
● $CaCl_2$ ● FW 110.99

● Spec. density 2.15 g/cm^3 (20℃) ● Solub. in H_2O 740 g/l (20℃) ● pH value ~8-10 (100 g/l, H_2O, 20℃)(slurry) ● Melting point 772℃ ● Boiling point 1600℃

● IMDG No Dangerous Good ● HS Code 2727 20 00
● RTECS EV9800000 ● Merck Index 10, 1630

Appearance ····· White crystal or grine lump. Deliquescence.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
pH (5 w/v%, 25℃) ····· 8.0~10.0
Sulfate (SO_4) ····· Max 0.01%
Nitrate (NO_3) ····· Max 0.003%
Ammonium (NH_4) ····· Max 0.005%
Barium (Ba) ····· Max 0.006
Lead (Pb) ····· Max 0.001%
Arsenic (As) ····· Max 3 ppm
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
1091	500g	7,000

Calcium Chloride, anhydrous CP

Appearance ····· White crystal or grine lump. Deliquescence.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
pH (5 w/v%, 25℃) ····· 8.0~10.0
Sulfate (SO_4) ····· Max 0.01%
Nitrate (NO_3) ····· Max 0.003%
Ammonium (NH_4) ····· Max 0.005%
Barium (Ba) ····· Max 0.006
Lead (Pb) ····· Max 0.001%
Arsenic (As) ····· Max 3 ppm
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
3459	1kg	18,000

Calcium Chloride, dihydrate Extra Pure

염화칼슘, 2수염
● CAS No. 10035-04-8 ● EC No. 233-140-8
● $CaCl_2 \cdot 2H_2O$ ● FW 147.02

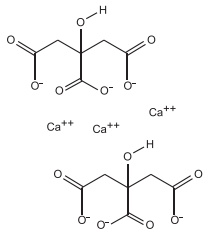
● Spec. density 1.85 g/cm^3 (20℃) ● Solub. in H_2O 1000 g/l (0℃) ● pH value 4.5~8.5 (50 g/l, H_2O, 20℃) ● Melting point ~176℃

● IMDG No Dangerous Good ● HS Code 2827 20 00
● RTECS EV9810000 ● Merck Index 10, 1630

Appearance ····· White crystal or grine lump. Deliquescence.
Assay ····· 99.0~103.0%
Solubility in water ····· To pass test
pH (5 w/v%, 25℃) ····· 4.5~8.5
Sulfate (SO_4) ····· Max 0.01%
Nitrate (NO_3) ····· Max 0.003%
Ammonium (NH_4) ····· Max 0.005%
Lead (Pb) ····· Max 0.001%
Arsenic (As) ····· Max 3 ppm
Iron (Fe) ····· Max 0.001%
Barium (Ba) ····· Max 0.006%

Product No.	Packing	Price(₩)
1097	500g	7,000
1098	1kg	11,300
1099	25kg	192,500

Calcium Citrate tetrahydrate CP



시트르산칼슘(구연산칼슘), Calcium(II) Citrate, Tricalcium Citrate, tri-calcium Citrate tetrahydrate
● CAS No. 5785-44-4 ● EC No. 212-391-7
● $Ca_3(C_6H_5O_7)_2 \cdot 4H_2O$ ● FW 570.49

● Solub. in H_2O 0.85 g/l (18℃) ● pH value 5~6 (25 g/l, H_2O, 20℃)(slurry) ● Bulk density 350 kg/cm^3 ● Boiling point 204℃(20 hPa) ● Ignition temp. ~400℃

● IMDG No Dangerous Good ● HS Code 2918 15 00

Product No.	Packing	Price(₩)
1101	500g	22,000

Calcium dihydrogen phosphate monohydrate
→ *go to Calcium Phosphate monobasic*

Calcium Fluoride CP

플루오르화칼슘
● CAS No. 7789-75-5 ● EC No. 232-188-7
● CaF_2 ● FW 78.08

● Spec. density 3.18 g/cm^3 (20℃) ● Solub. in H_2O 0.016 g/l (18℃) ● pH value ~4 (100 g/l, H_2O, 20℃)(slurry) ● Melting point 1418℃ ● Bulk density ~350-450 kg/cm^3 ● Boiling point 2513℃

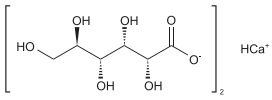
● IMDG No Dangerous Good ● HS Code 2826 19 00
● RTECS EW1760000

Assay ····· Min 98.0%
Chloride (Cl) ····· Max 0.04%
Ferric oxid(Fe_2O_3) ····· Max 0.02%

Product No.	Packing	Price(₩)
1104	500g	9,000

C

Calcium Gluconate CP



글루콘산칼슘, D-Gluconic acid calcium salt monohydrate
- CAS No. 66905-23-5
- EC No. 206-075-8
- $C_{12}H_{22}O_{14}Ca \cdot H_2O$ • FW 448.39

- Solub. in H_2O 30 g/l (20℃) • pH value 6.4~8.0 (50 g/l, H_2O, 20℃) • Melting point 178℃ • Bulk density ~560 kg/cm³

- IMDG No Dangerous Good • HS Code 2918 16 00
- Merck Index 10, 1643

Product No.	Packing	Price(₩)
1105	500g	22,000

Calcium Glycerophosphate Extra Pure

글리세로인산칼슘
- CAS No. 27214-00-2
- $HOCH_2CH(OH)CH_2OPO_3Ca$ • FW 210.14

Product No.	Packing	Price(₩)
2777	25g	7,000

Calcium Hydride Extra Pure

하이드라이드칼슘,
- CAS No. 7789-78-8 • EC No 232-189-2
- CaH_2 • FW 42.10

- Spec. density 1.9 g/cm³ (20℃) • Solub. in H_2O (rigorous decomposition) • Melting point 816℃

- IMDG UN1404 CALCIUM HYDRIDE, 4.3, I • HS Code 2850 00 20
- 3류 금속의 수소화물 300KG

Product No.	Packing	Price(₩)
1108	1kg	120,000

Calcium hydrogen phosphate dihydrate
→ *go to Calcium Phosphate dibasic dihydrate*

Calcium Hydroxide

수산화칼슘(소석회), LIME, slaked
- CAS No. 1305-62-0 • EC No. 215-137-3
- $Ca(OH)_2$ • FW 74.09

- Spec. density 2.24 g/cm³ (20℃) • Solub. in H_2O 1.7 g/l (20℃) • pH value 12.6 (20℃)(saturated solution) • Melting point 550℃ (decoposition) • Bulk density ~400 kg/cm³ • Boiling point 2850℃ (decoposition)

- IMDG No Dangerous Good • HS Code 2825 90 00
- RTECS EV2800000 • Merck Index 10, 1647

Calcium Hydroxide Extra Pure

Appearance	White powder or crystalline powder. Is odorless.
Assay	Min 95.0%
Hydrochloric acid insoluble matter	Max 0.1%
Carbonate	To pass test
Chloride (Cl)	Max 0.02%
Sulfate (SO_4)	Max 0.05%
Lead (Pb)	Max 0.005%
Iron (Fe)	Max 0.02%

Product No.	Packing	Price(₩)
3916	500g	6,300

Calcium Hydroxide GR

Appearance	White powder or crystalline powder. Is odorless.
Assay	Min 96.0%
Hydrochloric acid insoluble matter	Max 0.1%
Carbonate	To pass test
Chloride (Cl)	Max 0.01%
Sulfate (SO_4)	Max 0.05%
Sodium (Na)	Max 0.05%
Potassium (K)	Max 0.05%
Magnesium (Mg)	Max 1.0%
Lead (Pb)	Max 0.003%
Arsenic (As)	Max 0.5%
Chromium (Cr)	Max 0.005%
Manganese (Mn)	Max 0.01%
Iron (Fe)	Max 0.02%

Product No.	Packing	Price(₩)
3917	500g	7,000

Calcium Hypochlorite CP

차염소산칼슘(표백분), Bleaching powder, Chlorinated Lime
- CAS No. 7778-54-3 • EC No. 231-908-7
- $Ca(ClO)_2$ • FW 142.99

- Spec. density 2.35 g/cm³ (20℃) • Solub. in H_2O 200 g/l (20℃)(decoposition)
- Melting point 100℃

- IMDG UN1748 CALCIUM HYPOCHLORITE, DRY, 5.1, II • HS Code 2828 10 00
- RTECS NH3485000

Appearance	White granulated and smells of chlorine.
Assay(asCl)	Min 30.0%

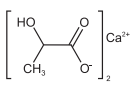
Product No.	Packing	Price(₩)
1114	500g	5,000

Calcium Hypophosphite Extra Pure

차아인산칼슘
- CAS No. 7789-79-9
- $Ca(H_2PO_2)_2$ • FW 170.05

Product No.	Packing	Price(₩)
1227	500g	9,800

Calcium Lactate Extra Pure



젖산칼슘, Lactic acid calcium salt
- CAS No. 5743-47-5 • EC No. 248-953-3
- $Ca(CH_2CHOHCOO)_2 \cdot 5H_2O$ • FW 308.30

- Solub. in H_2O 50 g/l (20℃) • pH value 7 (50 g/l, H_2O, 20℃) • Melting point 240℃ • Bulk density 300~500 kg/cm³ • Ignition temp. 610℃

- IMDG No Dangerous Good • HS Code 2918 11 00

Appearance	White odorless powdered or granulated, let the taste a little.
Assay(after dride)	95.0~101.0%
Solubility in water	To pass test
Acidity or Alkalify	To pass test
Heavy metals (as Pb)	Max 0.002%
Arsenic (As)	Max 0.0004%

Loss on drying ····· 25.0~30.0%

Product No.	Packing	Price(₩)
1228	500g	9,500

Calcium Nitrate, tetrahydrate — Extra Pure

질산칼슘

- CAS No. 13477-34-4 • EC No. 233-332-1
- $Ca(NO_3)_2 \cdot 4H_2O$ • FW 236.15

- Spec. density 1.82 g/cm³ (20℃) • Solub. in H_2O 1470 g/l (0℃) • Melting point 45℃
- Bulk density ~1000 kg/cm³

- IMDG UN1454 CALCIUM NITRATE, 5.1, Ⅲ • HS Code 2834 29 00
- RTECS NH3485000 • Merck Index 10, 1659

Appearance ····· White crystal or crystalline powder. Deliquescence.
Assay ····· Min 97.0%
Solubility in water ····· To pass test
pH (5w/v%, 25℃) ····· 4.0~6.5
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.01%
Barium (Ba) ····· To pass test
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%
Ammonium (NH_4) ····· Max 0.005%

Product No.	Packing	Price(₩)
1231	500g	7,000
1232	25kg	120,000

Calcium octadecanoate → *go to Calcium Stearate*

Calcium Oxide

산화칼슘(생석회), Lime, caustic, Quicklime

- CAS No. 1305-78-8 • EC No. 215-138-9
- CaO • FW 56.08

- Spec. density 3.37 g/cm³ (20℃) • Solub. in H_2O 1.65 g/l (20℃)(rigorous reaction)
- pH value 12.6 (20℃)(saturated solution) • Melting point 2580℃ • Bulk density 800~1200 kg/cm³ • Boiling point 2850℃

- IMDG No Dangerous Good • HS Code 2825 90 00
- RTECS EW3100000 • Merck Index 10, 1663

Calcium Oxide — Extra Pure

Product No.	Packing	Price(₩)
1890	1kg	10,000

Calcium Oxide — CP

Appearance ····· White or Milky white solid lump. Gray-yellow powder.
Assay ····· Min 90.0%
Loss on ignition ····· Max 6.0%
Chloride (Cl) ····· Max 0.05%

Product No.	Packing	Price(₩)
1233	500g	5,600

Calcium Pantothenate — Extra Pure

판토텐산칼슘

- CAS No. 137-08-6
- $[HOCH_2C(CH_3)_2CH(OH)CONH(CH_2)_2COO]_2Ca$ • FW 476.54

Product No.	Packing	Price(₩)
1234	25g	8,000

tri-Calcium phosphate → *go to Calcium Phosphate tribasic*

Calcium Phosphate, dibasic dihydrate — Extra Pure

제2인산칼슘, Calcium Hydrogen Phosphate dihydrate

- CAS No. 7789-77-7 • EC No. 231-826-1
- $CaHPO_4 \cdot 2H_2O$ • FW 172.09

- Spec. density 2.32 g/cm³ (20℃) • Solub. in H_2O 0.2 g/l(25℃) • pH value 7.5 (100 g/l, H_2O, 20℃)(slurry) • Bulk density ~550 kg/cm³

- IMDG No Dangerous Good • HS Code 2835 25 00
- Merck Index 10, 1670

Appearance ····· white crystal powder.
Assay ····· Min 98.0%
Loss on drying (at 200℃) ····· Max 22.0%
Chloride (Cl) ····· Max 0.05%
Nitrate ····· To pass test
Sulfate (SO_4) ····· Max 0.05%
Heavy metals (as Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.005%
Barium ····· To pass test
Arsenic (As) ····· Max 3 ppm

Product No.	Packing	Price(₩)
1109	500g	6,900
1110	25kg	137,500

Calcium Phosphate, monobasic

제1인산칼슘, Calcium Dihydrogen phosphate monohydrate

- CAS No. 10031-30-8
- $Ca(H_2PO_4)_2 \cdot H_2O$ • FW 252.07

Calcium Phosphate, monobasic — Extra Pure

Appearance ····· White crystal or crystalline powder
Assay ····· Min 90.0%
Solubility in dil. HCl ····· To pass test
Dibasic salt & free acid ····· To pass test
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.05%
Total Nitrogen (as N) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.004%
Iron (Fe) ····· Max 0.005%
Barium (Ba) ····· To pass test
Magnesium & Alkali metals (as Sulfate) ····· Max 0.6%
Arsenic (As) ····· Max 3 ppm

Product No.	Packing	Price(₩)
1102	500g	10,000
1103	25kg	137,500

Calcium Phosphate, monobasic — CP

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 90.0%
Chloride (Cl) ····· Max 0.01%
Iron (Fe) ····· Max 0.01%

Product No.	Packing	Price(₩)
1699	500g	7,500

C

Calcium Phosphate, tribasic — CP

제3인산칼슘, penta-Calciumhydroxide triphosphate, tri-Calcium phosphate, Pentacalcium hydroxide triphosphate, Tricalcium orthophosphate,
● CAS No. 7758-87-4 ● EC No. 231-840-8
● $Ca_3(PO_4)_2$ ● FW 310.18

● Spec. density 3.14 g/cm³ ● Solub. in H_2O 0.02 g/l(20℃) ● pH value 6~8 (50 g/l, H_2O, 20℃)(suspension) ● Melting point 1670℃ ● Bulk density ~250 kg/cm³

● IMDG No Dangerous Good ● HS Code 2835 26 00
● Merck Index 10, 1672

Appearance	White crystal or crystalline powder.
Assay	Min 90.0%
Solubility in dil. HCl	To pass test
Heavy metals (as Pb)	Max 0.003%
Arsenic (As)	Max 3 ppm

Product No.	Packing	Price(₩)
1235	500g	8,800
1896	15kg	112,500

Calcium Stearate — Extra Pure

스테아린산칼슘, Calcium Octadecanoate
● CAS No. 1592-23-0
● $[CH_3(CH_2)_{16}COO]_2Ca$ ● FW 607.03

Appearance	Light-White, bulky powder
Assay(as Ca)	6.4~7.1%
Loss on drying(at.105℃, 3hr.)	Max 4.0%
Heavy metals (as Pb)	Max 0.002%
Arsenic (As)	Max 2 ppm

Product No.	Packing	Price(₩)
1236	400g	8,000

Calcium Sulfate, calcined

황산칼슘(석고)
● CAS No. 10034-76-1 ● EC No. 231-900-3
● $CaSO_4 \cdot 0.5H_2O$ ● FW 145.15

Calcium Sulfate, calcined — Extra Pure

Product No.	Packing	Price(₩)
1900	500g	5,500
1238	25kg	94,500

Calcium Sulfate, calcined — CP

Product No.	Packing	Price(₩)
121	500g	5,500
1690	1kg	9,000

Calcium(II) citrate → *go to Calcium Citrate tetrahydrate*

Calcium sulfate dihydrate — Extra Pure

황산칼슘2수화물, Gypsum, Drierite
● CAS No. 10101-41-4 ● EC No. 231-900-3
● $CaSO_4 \cdot 2H_2O$ ● FW 172.17

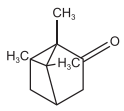
● Spec. density 2.32 g/cm³ (20℃) ● Solub. in H_2O 2 g/ℓ (20℃) ● pH value 7.0 (50 g/ℓ, H2O, 20℃, slurry) ● Bulk density 400~600 kg/cm³

● IMDG No Dangerous Good ● HS Code 2833 29 80
● RTECS EW4150000

Appearance	White powder.
Assay	Min 99.0%
Solubility in HCl	To pass test
Acidity (as H_2SO_4)	Max 0.01%
Alkality (as $Ca(OH)_2$)	Max 0.01%
Chloride (Cl)	Max 0.005%
Total nitrogen (as N)	Max 0.001%
Iron (Fe)	Max 0.001%
Heavy metals (as Pb)	Max 0.002%
Potassium (K)	Max 0.01%
Magnesium (Mg)	Max 0.01%
Sodium (Na)	Max 0.1%

Product No.	Packing	Price(₩)
4026	500g	5,500
4027	1kg	10,000
4028	25g	150,000

DL - Camphor — GR



DL-캠퍼,
● CAS No. 21368-68-3 ● EC No. 244-350-4
● $C_{10}H_{16}O$ ● FW 152.24

● Vapour pressure 0.27 hPa (20℃) ● Spec. density 0.092 g/cm³(25℃) ● Explosive limits 0.6~4.5 vol% ● Flash point 64℃ ● Solub. in H_2O 1.25 g/l (25℃) ● Melting point 172~176℃ ● Boiling point 204℃ ● Ignition temp. 466℃

● IMDG UN2717 CAMPHOR SYNTHETIL, 4.1, Ⅲ ● HS Code 2912 21 00

Appearance	Colorless or white crystalline granules. This fragrance smells mothballs.
Assay (by GC)	Min 96.0%
Solubility in petroleum benzen	To pass test
Melting point	175.0~179.0℃
Water	Max 0.3%
Residue after evaporation	Max 0.05%
Iron (Fe)	Max 0.001%

Product No.	Packing	Price(₩)
1241	500g	18,000

Canada balsam — Extra Pure

카나다발삼, Balsam Canada
● CAS No. 8007-47-4 ● EC No. 232-362-2

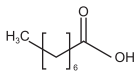
● Spec. density 0.98 g/cm³ (20℃) ● Flash point 39℃ ● Solub. in H_2O g/l (20℃) insoluble ● Bulk density 0.99 kg/cm³

● IMDG No Dangerous Good ● HS Code 1301 90 00
● RTECS CP2352500

Appearance	Unusual smell. Clear yellow sticky liquid.
Refractive index (n20D)	Min 1.519
Acid value	Min 30
Saponification value	Min 60
Solubility in xylene	To pass test
Cooling Test	To pass test

Product No.	Packing	Price(₩)
1242	25g	6,500
1903	500g	39,000

n-Caprylic acid — Extra Pure



카프릭산, Octanoic acid
● CAS No. 124-07-2 ● EC No. 204-677-5
● $CH_3(CH_2)_6COOH$ ● FW 144.21

● Vapour pressure 0.05 hPa (20℃) ● Spec. density 0.91 g/cm³(20℃) ● Explosive limits 1.4 vol% ● Flash point 130℃ o.c. ● Solub. in H_2O 0.68 g/l (20℃) ● pH value ~4 (0.2 g/l, H_2O, 20℃) ● Melting point 16℃ ● Boiling point 238℃(1013 hPa) ● Ignition temp. 440℃

● IMDG UN3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(OCTANOIC ACID), 8, Ⅲ ● HS Code 2915 90 00 ● Merck Index 10, 1739

Product No.	Packing	Price(₩)
1243	500g	18,000

Carbamide → *go to Urea*

Carbon disulfide — Extra Pure

이황화탄소
● CAS No. 75-15-0 ● EC No. 200-843-6
● CS_2 ● FW 76.13

● Vapour pressure 398 hPa (20℃) ● Spec. density 1.26 g/cm³(20℃) ● Explosive limits 1~60 vol% ● Flash point −30℃ c.c. ● Saturation conc. 1244 g/m³ (20℃) ● Melting point −111.6℃ ● Boiling point 46.5℃ ● Ignition temp. 95℃

● IMDG UN1131 CARBON DISULFIDE, 3(6.1), I ● HS Code 2813 10 00
● 4류 특수인화물 50ℓ

Appearance ····· Colorless, volatile liquid. It smells foul.
Assay (by GC) ····· Min 98.0%
Water ····· 0.04%
Density (20℃) ····· 1.261~1.266
Residue after evaporation ····· Max 0.002%
Free acid ····· To pass test
Sulfate (SO_4) ····· Max 6 ppm
Iodine-consuming substances ····· To pass test
Foreign sulfur compounds ····· To pass test

Product No.	Packing	Price(₩)
1244	1kg	19,500

Carbonic acid strontium salt → *go to Strontium Carbonate*

Carboxymethyl cellulose calcium salt → *go to CMC Ca*

Carboxymethyl cellulose sodium Salt → *go to CMC Na*

Carmine — Extra Pure

카민, C.I. 75470, calcium-aluminium lacquer of carminic acid
● CAS No. 1390-65-4 ● EC No. 215-724-4

● Solub. in H_2O (20℃) almost insoluble ● Bulk density ~290 kg/cm³

● IMDG No Dangerous Good ● HS Code 3203 00 00
● RTECS FH8891000

Product No.	Packing	Price(₩)
1907	25g	10,560

Casein, from Milk — Extra Pure

밀크카세인
● CAS No. 9000-71-9 ● EC No. 232-555-1

● Solub. in H_2O 20.1 g/l (20℃)(expermental) ● Bulk density ~450 kg/cm³

● IMDG No Dangerous Good ● HS Code 3501 10 00

Appearance ····· White~pale yellow powder or small particles.
Solubility in NaOH Solution ····· To pass test
Water soluble matter ····· Max 0.5%
Loss on drying (at 150℃) ····· Max 12.0%
Ignition residue (as Sulfate) ····· Max 1.5%
pH(25℃) ····· 4.0~6.5
Fat ····· Max 1.0%

Product No.	Packing	Price(₩)
1251	500g	30,000

Castor Oil(Ricinus Oil) — CP

피마자유
● CAS No. 8001-79-4

Appearance ····· Colorless ~ pale yellow clear viscous oil, the smell is a little unusual.
Adulteration ····· Do not haze with ethanol.
Specific gravity (25℃) ····· 0.953~0.965 g/ml
Water ····· Max 0.3%
Acid value ····· Max 2.0

Product No.	Packing	Price(₩)
1252	500㎖	10,500
1909	20kg	112,500

Cedar Oil — CP

세다유
● CAS No. 8000-27-9

Appearance ····· Unusual smell, clear light-yellow sticky liquid. 0.95 to 0.98 specific gravity.
Refractive index (n20D) ····· 1.514~1.522
Acid value ····· Max 20
Solubility in xylene ····· To pass test

Product No.	Packing	Price(₩)
1254	25g	5,300

Celite 545 — CP

셀라이트, absorbent for spilled liquids
● CAS No. 61790-53-2 ● EC No. 215-724-4

● Solub. in H_2O 0.001 g/l (20℃) ● pH value ~10 (100 g/l, H_2O, 20℃) ● Bulk density 300 kg/cm³

● IMDG No Dangerous Good ● HS Code 3802 90 00

Product No.	Packing	Price(₩)
1255	500g	5,500

C

C

Ceric Sulfate — Extra Pure / AR

NEW

황산제4세륨, Cerium(IV) sulphate; Cerium disulfate
- CAS No. 13590-82-4
- $Ce(SO_4)_2 \cdot 2H_2SO_4$ • FW 528.40

Product No.	Packing	Price(₩)
5124	25g	36,000

Cerium(Ⅲ) Nitrate hexahydrate — GR

세륨(III)질산 6수화물
- CAS No. 10294-41-4
- $Ce(NO_3)_3\ 6H_2O$ • FW 434.23

Appearance	Agglomeriating white crystals.
Assay (CeO_2 /TREO)	Min 99.0%
Solubility in nitric acid	To pass test
Chloride (Cl)	Max 0.01%
Sulfate (SO_4)	Max 0.02%
Ferric oxide (Fe_2O_3)	Max 15 ppm
Calcium oxide (CaO)	Max 50 ppm

Product No.	Packing	Price(₩)
4072	500g	137,500

Cerium(IV) sulphate → *go to Ceric Sulphate*

Cesium Chloride — Extra Pure

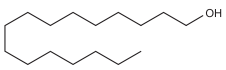
염화세슘, Caesium
- CAS No. 7647-17-8 • EC No. 231-600-2
- CsCl • FW 168.36

• Spec. density 3.97 g/cm³ (20℃) • Solub. in H_2O 1860 g/l (20℃) • pH value 7~9 (50 g/l, H_2O, 20℃) • Melting point 646℃ • Bulk density ~1800 kg/cm³ • Boiling point 1382℃

• IMDG No Dangerous Good • HS Code 2827 39 00
• Merck Index 10, 1969

Product No.	Packing	Price(₩)
1256	25g	22,500

Cetyl Alcohol — Extra Pure



세틸알콜, 1-Hexadecanol
- CAS No. 36653-82-4
- EC No. 253-149-6
- $CH_3(CH_2)_{15}OH$ • FW 242.44

• Vapour pressure < 1 hPa (20℃) • Spec. density 0.82 g/cm³(50℃) • Flash point ~155℃ (DIN51758) • Solub. in H_2O 0.0001 g/l (25℃) • Bulk density 410~450 kg/cm³ • Boiling point 305~330℃ • Ignition temp. ~235℃ (DIN51794)

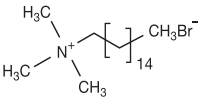
• IMDG No Dangerous Good • HS Code 2905 17 00
• Merck Index 10, 1983

Appearance	Viscosity, such as candles, white powder or lumps. Almost no smell and taste.
Melting point	49.0~51.5℃
Solubility in ethanol	To pass test
Ignition residue (as Sulfate)	Max 0.05%
Acid value	Max 1.0
Saponification value	Max 2.0
Hydroxyl value	210~232
Iodine value	Max 5

Product No.	Packing	Price(₩)
811	500g	9,400

N-Cetyl-N,N,N Trimethyl Ammonium Bromide 98% — Extra Pure

NEW



세틸트리메틸암모늄브롬화물, CTAB
- CAS No. 57-09-0 • EC No. 200-311-3
- $C_{16}H_{33}N(CH_3)_3Br$ • FW 364.45

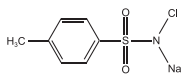
• Solub. in H_2O 0.192 g/l (20℃) • pH value ~ 5 – 7 (50 g/l, H_2O, 20℃) • Melting point 250 – 256℃ • Bulk density ~ 390 kg/m³

• IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(HEXADECYLTRIMETHYLAMMONIUMBROMIDE), 9, III
• HS Code 2923 90 00 • RTECS BQ7875000

Product No.	Packing	Price(₩)
5125	25g	13,800

Charcoal activated → *go to Activated Carbon*

Chloramine T trihydrate — GR



클로라민 T, Tosylchloramide sodium, N-Chloro-4-toluenesulfonamide sodium salt, Chlorine bleaching solution
- CAS No. 7080-50-4 • EC No. 204-854-7
- $CH_3C_6H_4SO_2NClNa \cdot 3H_2O$ • FW 281.69

• Flash point 192℃ • Solub. in H_2O 150 g/l (25℃) • pH value 8~10 (50 g/l, H_2O, 20℃) • Bulk density 540~680 kg/cm³

• IMDG UN3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.(CHLORAMINE T),8,III • HS Code 2935 00 00 • Merck Index 10, 2033

Product No.	Packing	Price(₩)
1259	25g	6,000
1260	500g	42,000

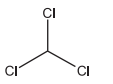
Chlorinated lime → *go to Calcium Hypochlorite*

Chloro calcium → *go to Calcium Chloride (for drying)*

Chloroacetic acid → *go to Monochloroacetic Acid*

2-Chloroethanol → *go to Ethylene Chlorohydrin*

Chloroform



클로로폼, Trichloromethane
- CAS No. 67-66-3 • EC No. 200-663-8
- $CHCl_3$ • FW 119.38

• Vapour pressure 213 hPa (20℃) • Spec. density 1.47 g/cm³(20℃) • Solub. in H_2O 8 g/l (20℃) • Saturation conc. 1027 g/m³ (20℃) • Melting point −63℃ • Boiling point 61℃(1013 hPa)

• IMDG UN1888 Chloroform, 6.1,III • HS Code 2903 13 00
• RTECS FS9100000 • Merck Index 10, 2111

Chloroform — Extra Pure

Appearance	A Colorless, volatile liquid; characteristic odor
Assay (by GC Excluding preservative)	Min 99.5%
Water	Max 0.05%
Residue after evaporation	Max 0.001%
Acidity (as HCl)	Max 0.001%
Chloride (Cl)	Max 1 ppm
Free chlorine	To pass test
Substances darkened by sulfuric acid	To pass test
Ethanol(Stabilizer)	0.3~1.0%

Product No.	Packing	Price(₩)
1267	500g	5,000
1268	1kg	7,500
1269	25kg	81,300
1656	250kg	Call

Chloroform — GR

Appearance	A Colorless, volatile liquid; characteristic odor
Identification	To pass test
Assay (by GC Excluding preservative)	Min 99.5%
Water	Max 0.05%
Residue after evaporation	Max 0.001%
Acidity (as HCl)	Max 0.001%
Chloride (Cl)	Max 1 ppm
Free chlorine	To pass test
Aldehyde	To pass test
Ketone	To pass test
Carbon Tetrachloride	Max 0.01%
Substances darkened by sulfuric acid	To pass test
Solubility for use in Dithizone test	To pass test
Ethanol(Stabilizer)	0.3~1.0%

Product No.	Packing	Price(₩)
1266	1kg	8,500
3996	2.5 ℓ	16,000
3062	4 ℓ	40,000

Chloroform (stabilized with Ethanol) — HPLC

Meets ACS Specification

Ultraviolet Spectrophotometry	
Maximum UV Absorbance	
245 nm	Max 1.00
250nm	Max 0.33
254nm	Max 0.15
270nm	Max 0.02
280nm	Max 0.01
UV Cutoff	Max 245 nm
Assay (by GC, Excluding preservative)	Min 99.8%
Color (APHA)	Max 10
Water	Max 0.02%
Residue after evaporation	Max 2 ppm
Preservative (Ethanol)	0.5~1.0%
Lead (Pb)	Max 0.05 ppm
Acid and Chloride	To pass test
Free Chlorine	To pass test
Solubility for use in Dithizone test	To pass test
Acetone or aldehyde	Max 0.005%

Product No.	Packing	Price(₩)
1271	4 ℓ	42,500

Chloroform (stabilized with Ethanol) — PESTICIDE

Extraction-Concentration Suitability	
ECD Detectable residue (as Heptachlor epoxide)	Max 10 ppt
Assay (by GC, Excluding preservative)	Min 99.8%
Color (APHA)	Max 10
Water	Max 0.02%
Residue after Evaporation	Max 2 ppm

Product No.	Packing	Price(₩)
1272	4 ℓ	52,500

Chloroform (stabilized with Ethanol) — Ultimate

Extraction-Concentration Suitability	
ECD Detectable residue (as Heptachlor epoxide)	Max 10 ppt
FID Detectable residue (as 2-Octanol)	Max 5 ppb
Ultraviolet Spectrophotometry	
Maximum UV Absorbance	
245nm	Max 1.00
250nm	Max 0.33
254nm	Max 0.15
270nm	Max 0.02
280nm	Max 0.01
UV Cutoff	Max 245 nm
Assay (by GC, Excluding preservative)	Min 99.9%
Color (APHA)	Max 10
Water	Max 0.02%
Residue after Evaporation	Max 1 ppm
Fluorescence Background	To pass test
Preservative (Ethanol)	0.5~1.0%
Lead (Pb)	Max 0.05 ppm
Acid and Chloride	To pass test
Free Chlorine	To pass test
Substances darkened by sulfuric acid	To pass test
Suitability for use in Dithizone test	To pass test
Acetone and Aldehyde	Max 0.005%

Product No.	Packing	Price(₩)
1782	4 ℓ	51,250

Chloroform (stabilized with Ethanol) — Ultra Dry

Assay (by GC, Excluding preservative)	Min 99.8%
Color (APHA)	Max 10
Water	Max 50 ppm
Residue after Evaporation	Max 3 ppm

Product No.	Packing	Price(₩)
1274	4 ℓ	51,300

Chloroform (stabilized with Amylene) — HPLC

Meets ACS Specification	
Ultraviolet Spectrophotometry	
Maximum UV Absorbance	
245nm	Max 1.00
250nm	Max 0.33
254nm	Max 0.15
270nm	Max 0.02
280nm	Max 0.01
UV Cutoff	Max 245 nm
Assay (by GC)	Min 99.8%
Color (APHA)	Max 10
Water	Max 0.02%
Residue after Evaporation	Max 2 ppm
Preservative (Amylene)	40~200 ppm
Lead (Pb)	Max 0.05 ppm
Acid and Chloride	To pass test
Free Chlorine	To pass test
Solubility for use in Dithizone	To pass test
Acetone or aldehyde	Max 0.005%

Product No.	Packing	Price(₩)
1781	4 ℓ	43,800

C

Chloroform (stabilized with Amylene) PESTICIDE

Extraction-Concentration Suitability
- ECD Detectable residue (as Heptachlor epoxide) ····· Max 10 ppt

Assay (by GC) ····· Min 99.8%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after Evaporation ····· Max 2 ppm
Chloride (Cl) ····· Max 10 ppm

Product No.	Packing	Price(₩)
1780	4 ℓ	Call

Chloroform (stabilized with Amylene) Ultimate

Extraction-Concentration Suitability
- ECD Detectable residue (as Heptachlor epoxide) ····· Max 10 ppt
- FID Detectable residue (as 2-Octanol) ····· Max 5 ppb

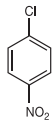
Ultraviolet Spectrophotometry
- Maximum UV Absorbance
- 245nm ····· Max 1.00
- 250nm ····· Max 0.33
- 254nm ····· Max 0.15
- 270nm ····· Max 0.02
- 280nm ····· Max 0.01
- UV Cutoff ····· Max 245 nm

Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after Evaporation ····· Max 1 ppm
Fluorescence Background ····· To pass test
Preservative (Amylene) ····· 40~200 ppm
Lead (Pb) ····· Max 0.05 ppm
Acid and Chloride ····· To pass test
Free Chlorine ····· To pass test
Substances darkened by sulfuric acid ····· To pass test
Suitability for use in Dithizone test ····· To pass test
Acetone and Aldehyde ····· Max 0.005%

Product No.	Packing	Price(₩)
1779	4 ℓ	56,300

NEW

1-Chloro-4-Nitrobenzene Extra Pure



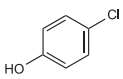
1-클로로-4-니트로벤젠, p-Nitrochlorobenzene
- CAS No. 100-00-5
- $C_6H_4ClNO_2$ ● FW 157.56

- IMDG UN1578 CHLORONITROBENZENES, SOLID, 6.1, II ● HS Code 2904 20 90

Product No.	Packing	Price(₩)
5126	25g	5,300

NEW

4-Chlorophenol Extra Pure



4-클로로페놀, p-Chlorophenol
- CAS No. 106-48-9 ● EC No. 203-402-6
- Cl · C_6H_4 · OH ● FW 128.56

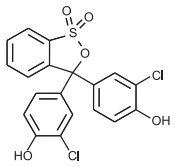
- Vapour pressure 0.15 hPa (20℃) ● Spec. density 1.26 g/cm³ (45℃) ● Flash point 121 ℃ ● Solub.in H_2O 27g/l (20℃) ● Melting point 41 – 44 ℃ ● Boiling point 216 –218 ℃

- IMDG UN 2020 CHLOROPHENOLS, SOLID,6.1, III ● HS Code 2908 19 00
- Merck Index 10, 2126

Product No.	Packing	Price(₩)
5127	500g	17,500

p-Chlorophenol → *go to 4-Chlorophenol*

Chlorophenol Red Indicator



클로로페놀레드, 3,3"-Dichlorophenolsulfonphthalein
- CAS No. 4430-20-0 ● EC No. 224-619-2
- $C_{19}H_{12}Cl_2O_5S$ ● FW 423.27

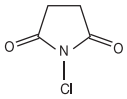
- Solub. in H_2O (20℃) insoluble ● Melting point ~261℃
- Bulk density ~720 kg/cm³

- IMDG No Dangerous Good
- HS Code 2934 99 00

Product No.	Packing	Price(₩)
1276	25g	45,000

NEW

N-Chlorosuccinimide Extra Pure



N-클로로숙신이미드
1-Chloro-2,5-pyrrolidinedione, Succinochlorimide
- CAS No. 128-09-6 ● EC No. 204-878-8
- $C_4H_4ClNO_2$ ● FW 133.53

- Spec. density 1.65 g/cm³(20℃) ● Solub. in H_2O 14 g/l (20℃) ● Melting point 146 – 151 ℃ ● Flash point 〉110℃
- Bulk density ~ 600 kg/m³ ● Boiling point 216.5℃

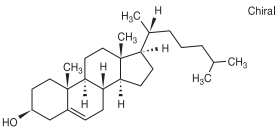
- IMDG UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.(N-CHLORO-SUCCINIMIDE), 8, II ● HS Code 2929 90 00
- RTECS UY1013500

Product No.	Packing	Price(₩)
5128	25g	7,000

α-Chlorotoluene → *go to Benzyl Chloride*

NEW

Cholesterol Extra Pure



콜레스테롤
- CAS No. 57-88-5 ● EC No. 200-353-2
- $C_{27}H_{46}O$ ● FW 386.67

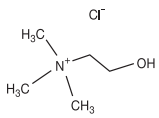
- Spec. density 1.07 g/cm³(20℃) ● Solub. in H_2O (20 ℃) insoluble ● pH value 6.5~8.5 (50g/l, H_2O, 20℃) ● Melting point 147-150 ℃ ● Bulk density ~260 kg/m³ ● Boiling point ~360 ℃ (decomposition)

- IMDG NO Dangerous Good ● HS Code 2906 13 10
- Merck Index 10, 2181

Product No.	Packing	Price(₩)
5129	25g	22,500
5130	500g	300,000

NEW

Choline chloride Extra Pure



염화콜린
- CAS No. 67-48-1 ● EC No. 200-655-4
- $C_5H_{14}ClNO$ ● FW 139.62

- Solub. in H_2O (20℃) soluble ● pH value 4-6 (100g/l, H_2O, 20℃)(slurry) ● Bulk density ~430kg/m³ ● Ignition temp. 355 ℃ (DIN 51794)

- IMDG NO Dangerous Good ● HS Code 2923 10 00
- Merck Index 10, 2185

Product No.	Packing	Price(₩)
5131	25g	36,000

Chromium(Ⅲ) Chloride, hexahydrate — Extra Pure / AR

- CAS No. 10060-12-5
- $CrCl_3 \cdot 6H_2O$ ● FW 266.44

Product No.	Packing	Price(₩)
4610	500g	27,500

Chromium metal Powder — Extra Pure

금속크롬분말

- CAS No. 7440-47-3 ● EC No. 231-157-5
- Cr ● FW 51.99

- Spec. density 7.14 g/cm³(20℃) ● Solub. in H_2O (20℃) insoluble ● Melting point ~1890 ℃ ● Boiling point 2200 ℃

- IMDG NO Dangerous Good ● HS Code 8112 21 90
- RTECS DI1590000

Product No.	Packing	Price(₩)
5132	500g	52,500

Chromium (Ⅲ) Nitrate, nonahydrate

질산크로뮴

- CAS No. 7789-02-8 ● EC No. 236-921-1
- $Cr(NO_3)_3 \cdot 9H_2O$ ● FW 400.15

- Solub. in H_2O 810 g/l (20℃) ● pH value 2~3 (50 g/l, H_2O, 20℃) ● Melting point 60℃ ● Bulk density ~710 kg/cm³

- IMDG UN2720 CHROMIUM NITRATE, 5.1,Ⅲ ● HS Code 2834 29 00
- Merck Index 10, 2205

Chromium (Ⅲ) Nitrate, nonahydrate — CP

Product No.	Packing	Price(₩)
1283	500g	19,500

Chromium (Ⅲ) Nitrate, nonahydrate — Extra Pure

Product No.	Packing	Price(₩)
5663	500g	Call

Chromium (Ⅲ) Oxide — Extra Pure

산화제2크로뮴(산화크로뮴), Chromic Oxide

- CAS No. 1308-38-9 ● EC No. 215-607-8
- Cr_2O_3 ● FW 151.99

- Spec. density 5.22 g/cm³ (25℃) ● Solub. in H_2O (20℃) insoluble ● Melting point 2435℃ ● Bulk density ~800 kg/cm³ ● Boiling point ~3000℃

- IMDG No Dangerous Good ● HS Code 2819 90 00
- RTECS GB6745000 ● Merck Index 10, 2206

Appearance	Green powder
Assay	Min 99.0%
Loss on ignition	Max 0.2%
Sulfate(SO_4)	Max 0.05%

Product No.	Packing	Price(₩)
3518	500g	12,000

Chromium(Ⅵ) oxide → *go to Chromium trioxide*

Chromium Trioxide — Extra Pure

산화크로뮴 (무수크롬산), Chromic Anhydride, Chromium (Ⅵ) Oxide

- CAS No. 1333-82-0 ● EC No. 215-607-8
- CrO_3 ● FW 99.99

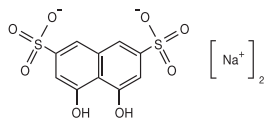
- Spec. density 2.7 g/cm³ (20℃) ● Solub. in H_2O 1854 g/l (20℃) ● pH value < 1 (100 g/l, H_2O, 20℃) ● Melting point 197℃ ● Bulk density ~900 kg/cm³

- IMDG UN1463 CHROMIC TRIOXIDE ANHYDROUS, 5.1(6.1,8),II
- HS Code 2819 10 00 ● 1류 크롬, 납 또는 요오드의 산화물 300kg
- RTECS GB6650000 ● Merck Index 10, 2206

Ignition loss	Max 0.2%
Sulfate (SO_4)	Max 0.05%
Assay	99.0~100.0%

Product No.	Packing	Price(₩)
1281	1kg	18,000

Chromotropic Acid Disodium salt — Extra Pure



크로모트로픽산 디나트륨염 2수화물

- CAS No. 5808-22-0
- $C_{10}H_6Na_2O_8S_2 \cdot 2H_2O$ ● FW 400.29

Appearance	Brown colored powder.
Assay	Min 98.0%
Water	Max 10.0%

Product No.	Packing	Price(₩)
4945	25g	64,500

CI 11020 → *go to Methyl Yellow*

CI 13020 → *go to Methyl Red*

CI 13025 → *go to Methyl Orange*

CI 14270 → *go to Tropaeolin O*

CI 14645 → *go to Eriochrome Black T*

CI 22120 → *go to Congo Red*

CI 26100 → *go to Sudan-III*

CI 42000 → *go to Malachit Green Oxalate*

CI 42510 → *go to Fuchsin Basic*

CI 42535 → *go to Methyl Violet 2B*

CI 42555 → *go to Gentian Violet*

CI 45380 → *go to Eosin Y*

CI 50040 → *go to Neutral red*

C

CI 52015 → *go to Methylene Blue trihydrate*

CI 73015 → *go to Indigo Carmine 0.1% solution*

Citric Acid 12% — Solution

시트르산 12%

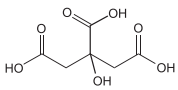
Product No.	Packing	Price(₩)
2805	1 ℓ	7,800
2806	20kg	62,500

Citric Acid 50% — Solution

시트르산 50%

Product No.	Packing	Price(₩)
4568	20kg	82,500
4337	250kg	Call

Citric Acid anhydrous — Extra Pure



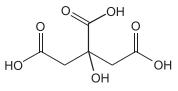
시트르산,무수(무수구연산), Hydroxytricarballylic acid
- CAS No. 77-92-9 • EC No. 201-069-1
- $C_6H_8O_7$ • FW 192.12
- Vapour pressure < 0.1 hPa (20℃) • Spec. density 1.665 g/cm³(18℃) • Solub. in H_2O 1330 g/l (20℃) • pH value ~1.7 (100 g/l, H_2O, 20℃) • Melting point ~153℃ (decomposition) • Bulk density ~560 kg/cm³ • Ignition temp. 345℃

- IMDG No Dangerous Good • HS Code 2918 14 00
- RTECS GE7350000 • Merck Index 10, 2297

Appearance	Colorless crystals or white crystalline powder or as granules are acidic.
Assay	Min 99.5%
Solubility in water	To pass test
Solubility in ethanol	To pass test
Chloride (Cl)	Max 0.001%
Phosphate (PO_4)	Max 0.001%
Sulfur compound(as SO_4)	Max 0.02%
Calcium(Ca)	Max 0.005%
Lead (Pb)	Max 0.001%
Iron (Fe)	Max 0.001%
Oxalic acid	To pass test

Product No.	Packing	Price(₩)
1284	500g	7,000

Citric Acid monohydrate



시트르산(구연산), Hydroxytricarballylic acid
- CAS No. 5949-29-1 • EC No. 201-069-1
- $C_6H_8O_7 \cdot H_2O$ • FW 210.14
- Vapour pressure < 0.1 hPa (20℃)(anhydrous substance) • Spec. density 1.54 g/cm³(20℃) • Solub. in H_2O 1630 g/l (20℃) • pH value 1.85 (50 g/l, H_2O, 25℃) • Melting point 135~152℃ • Bulk density ~800-1000 kg/cm³ • Ignition temp. 345℃ (anhydrous substance)

- IMDG No Dangerous Good • HS Code 2918 14 00
- RTECS GE7810000 • Merck Index 10, 2297

Appearance	White crystals, grain of the crystalline powder.
Assay	Min 99.5%
Solubility in water	To pass test
Solubility in ethanol	To pass test
Chloride (Cl)	Max 0.001%
Phosphate (PO_4)	Max 0.001%
Sulfur compound(as SO_4)	Max 0.02%
Calcium(Ca)	Max 0.005%
Lead (Pb)	Max 0.0005%
Iron (Fe)	Max 0.001%
Oxalic acid($C_2H_2O_4$)	Max 0.05%

Product No.	Packing	Price(₩)
1287	500g	7,000
1288	1kg	10,000
1289	25kg	117,500

Clay Acid — Extra Pure

산성백토

Appearanc	Pale yellow or light gray, fine powder
Loss on drying (at 110℃)	Max 15%
Acid content as H_2SO_4	Max 0.4%
pH (10% sol.)	About. 3

Product No.	Packing	Price(₩)
3905	500g	5,500
3906	25kg	28,600

Clay Activated — Extra Pure

활성백토

Product No.	Packing	Price(₩)
1292	500g	5,000

CMC Ca — Extra Pure

시엠시칼슘, Carboxymethyl Cellulose Calcium Salt
- CAS No. 9050-04-8

Appearance	White ~ yellow powder. There is no smell.
pH(1% Sol.)	4.5~6.5
Loss on drying (at.105℃, 4hr.)	Max 10.0%
Ignition residue (as Sulfate)	10.0~20.0%
Alkalies	To pass test
Starch	To pass test
Chloride (Cl)	Max 0.36%
Sulfate (SO_4)	Max 0.96%
Silicate (SiO_2)	Max 0.5%

Product No.	Packing	Price(₩)
1090	500g	16,300

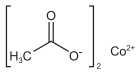
CMC Na — Extra Pure

시엠시나트륨, Carboxymethyl Cellulose Sodium Salt
- CAS No. 9004-32-4
- [C6H7O2(OH)x (OCH2COONa)y]n

Appearance	White – yellow powder or granules. No taste.
pH(1% Sol.)	6.0~8.0
Loss on drying (at.105℃, 4hr.)	Max 10.0%
Solubility in water	To pass test
Starch	To pass test
Chloride (Cl)	Max 0.64%
Sulfate (SO_4)	Max 0.96%
Silicate (SiO_2)	Max 0.5%
Heavy metals (as Pb)	Max 0.002%
Arsenic (As)	Max 1%

Product No.	Packing	Price(₩)
1249	500g	11,300

Cobalt Acetate tetrahydrate — Extra Pure



아세트산코발트, Cobalt(II) Acetate tetrahydrate, Acetic acid cobalt(II) salt

- CAS No. 6147-53-1 • EC No. 200-755-8
- $(CH_3COO)_2Co \cdot 4H_2O$ • FW 249.1

- Spec. density 1.70 g/cm³(20℃) • Solub. in H_2O 380 g/l (25℃) • pH value ~7.2 (50 g/l, H_2O, 20℃) • Melting point 140℃ (release of crystalline water) • Bulk density ~850 kg/cm³

- IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COBALT ACETATE), 9, Ⅲ • HS Code 2915 29 00 • Merch Index 10, 2388

Appearance	Red-purple crystals or crystalline powder is a little deliquescent.
Assay	Min 97.0%
Solubility in dil. Acetic acid	To pass test
pH (5w/v%, 25℃)	Max
Chloride (Cl)	Max 0.01%
Nitrate (NO_3)	To pass test
Sulfate (SO_4)	Max 0.02%
Copper (Cu)	Max 0.01%
Nickel (Ni)	Max 0.5%
Alkali metal and Alkali metal earths	Max 0.3%

Product No.	Packing	Price(₩)
1293	500g	37,500

Cobalt Carbonate, basic — CP

염기성 탄산코발트

- CAS No. 513-79-1
- $Co_5(OH)_6(CO_3)_2$ • FW 504.72

Product No.	Packing	Price(₩)
1924	500g	112,500

Cobalt Chloride hexahydrate — Extra Pure

염화코발트, Cobalt(II) Chloride hexahydrate

- CAS No. 7791-13-1 • EC No. 231-589-4
- $CoCl_2 \cdot 6H_2O$ • FW 237.93

- Spec. density 1.92 g/cm³ (25℃) • Solub. in H_2O 76 g/l (0℃) • pH value ~4.9 (50 g/l, H_2O, 25℃) • Melting point 56℃ • Bulk density ~1250 kg/cm³

- IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COBALT DICHLORIDE), 9, Ⅲ • HS Code 2827 39 00
- RTECS GG020000 • Merch Index 10, 2392

Solubility in water	To pass test
pH (5% Sol.)	Max 3.0~6.0
Nitrate (NO_3)	To pass test
Sulfate (SO_4)	Max 0.05%
Iron (Fe)	Max 0.05%
Nickel (Ni)	Max 0.5%
Zinc (Zn)	Max 0.1
Assay	Min 95.0%

Product No.	Packing	Price(₩)
1294	500g	45,000

Cobalt Nitrate hexahydrate — Extra Pure

질산코발트, Cobalt(II) Nitrate hexahydrate

- CAS No. 10026-22-9 • EC No. 233-402-1
- $Co(NO_3)_2 \cdot 6H_2O$ • FW 291.03

- Spec. density 1.87 g/cm³ (20℃) • Solub. in H_2O 1330 g/l (0℃) • pH value ~4.0 (100 g/l, H_2O, 20℃) • Melting point 57℃ • Bulk density ~800 kg/cm³

- IMDG UN1477 NITRATES, INORGANIC, N.O.S, 5.1, II • HS Code 2834 29 00
- RTECS QU7355500 • Merck Index 10, 2399

Appearance	Red-brown crystal, to deliquescent.
Assay	Min 97.0%
pH (5w/v%, 25℃)	Max 3.0
Solubility in water	To pass test
Chloride (Cl)	Max 0.02%
Sulfate (SO_4)	Max 0.05%
Zinc (Zn)	Max 0.1
Iron (Fe)	Max 0.05%
Nickel (Ni)	Max 0.5%

Product No.	Packing	Price(₩)
1295	500g	47,500

Cobalt Sulfate heptahydrate — Extra Pure

황산코발트, Cobalt(II) Sulfate heptahydrate

- CAS No. 10026-24-1 • EC No. 233-334-2
- $CoSO_4 \cdot 7H_2O$ • FW 281.12

- Spec. density 1.95 g/cm³ (20℃) • Solub. in H_2O 362 g/l (20℃) • pH value ~4 (100 g/l, H_2O, 20℃) • Melting point 98℃ • Bulk density ~900 kg/cm³

- IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COBALT ACETATE), 9, Ⅲ • HS Code 2833 29 00
- RTECS GG3200000 • Merck Index 10, 2404

Appearance	Red crystals or crystalline powder, to deliquescent.
Assay	Min 98.0%
pH (5% Sol.)	Min 3.0
Solubility in water	To pass test
Chloride (Cl)	Max 0.01%
Nitrate (NO_3)	To pass test
Zinc (Zn)	Max 0.02
Iron (Fe)	Max 0.01%
Nickel (Ni)	Max 0.3%
Substances not precipitated by $(NH_4)_2S$(as SO_4)	Max 0.4%

Product No.	Packing	Price(₩)
1297	500g	43,000

Cobalt tetra oxide → *go to Cobalt(II,III) Oxide*

Cobalt(II) acetate tetrahydrate
→ *go to Cobalt Acetate tetrahydrate*

Cobalt(II) chloride hexahydrate
→ *go to Cobalt Nitrate hexahydrate*

Cobalt(II) Nitrate hexahydrate → *go to Cesium Chloride*

Cobalt(II) Sulfate heptahydrate
→ *go to Cobalt Sulfate heptahydrate*

C

C

Cobalt (Ⅱ, Ⅲ) Oxide — CP

산화코발트, Cobalt tetra Oxide, Cobalt black
● CAS No. 1308-06-1 ● EC No. 215-157-2
● Co_3O_4 ● FW 240.80

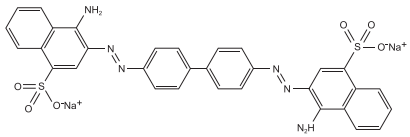
● Spec. density 6.07 g/cm³ (20℃) ● Solub. in H_2O (20℃) insoluble ● Melting point ~895℃ ● Bulk density ~1250 kg/cm³

● IMDG No Dangerous Good ● HS Code 2822 00 00
● RTECS GG2500000

Appearance	Gray or black powder.
Assay(as Co)	70.0~74.0%

Product No.	Packing	Price(₩)
1296	500g	112,000

Congo Red — GR



콩고레드, C.I. 22120
● CAS No. 573-58-0 ● EC No. 209-358-4
● $C_{32}H_{22}N_6Na_2O_6S_2$ ● FW 696.68

● Solub. in H_2O 25 g/l (20℃) ● pH value ~6.7 (10 g/l, H_2O, 20℃) ● Bulk density ~600-700 kg/cm³ ● Ignition temp. 345℃ (anhydrous substance)

● IMDG UN2811 TOXIC SOLID, ORGANIC, N.O.S. (DISODIUM-3,3'-((1,1-BIPHENYL)-4,4'-DIYLBIS(AZO))BIS (4-AMINONAPHTHALENE-1-SULFONATE)), 6.1, Ⅲ
● HS Code 3204 14 00

Appearance	Dark red powder.
Solubility in water	To pass test
Absorbance(10mg/l, pH 5.0)	Min 0.27
Loss on drying (at.105℃, 4hr.)	Max 8.0%
Ignition residue (as Sulfate)	18.0~40.0%
pH range	3.0(Purple)~5.0(Dark red)

Product No.	Packing	Price(₩)
1300	25g	9,000

Congo Red solution — Indicator solution

콩고레드용액

Product No.	Packing	Price(₩)
1299	500㎖	11,400

Copper, Powder

동,분말
● CAS No. 7440-50-8 ● EC No. 231-159-6
● Cu ● FW 63.55

● Vapour pressure 0 hPa (20℃) ● Spec. density 8.96 g/cm³(20℃) ● Melting point 1082℃ ● Bulk density 1290 kg/cm³ ● Boiling point 2580℃ (1013 hPa)

● IMDG UN3089 METAL POWDER, FLAMMABLE, N.O.S. (COPPER POWDER), 4.1, Ⅲ, Marine Pollutant: PP ● HS Code 7406 10 00
● Merck Index 10, 2491

Copper, Powder — Extra Pure

Appearance	Red or gold metal. granules or powder.
Assay	Min 99.85%
Silver (Ag)	To pass test
Lead (Pb)	Max 0.005%
Iron (Fe)	Max 0.005%
Arsenic (As)	Max 0.001%

Product No.	Packing	Price(₩)
1301	500g	22,500

Copper, Powder — CP

Product No.	Packing	Price(₩)
3420	25kg	750,000

Copper (Ⅰ) Chloride — Extra Pure

염화제일동, Cuprous chloride, Copper monochloride
● CAS No. 7758-89-6 ● EC No. 231-842-9
● CuCl ● FW 99.0

● Spec. density 4.14 g/m³ (20℃) ● Solub. in H_2O 0.001~0.1 g/l (18℃) ● pH value 5 (50 g/l, H_2O, 20℃, slurry) ● Melting point 422℃ ● Bulk density 1600~1800 kg/cm³

● IMDG UN2802 COPPER CHLORIDE, 8, Ⅲ, Marine Pollutant
● HS Code 2828 39 85 ● RTECS GL6990000

Appearance	ivory white powder or lump.
Assay	Min 90.0%
Solubility in acetic acid	To pass test
Sulfate (SO_4)	Max 0.35%
Arsenic (As)	Max 0.001%
Iron (Fe)	Max 0.02%

Product No.	Packing	Price(₩)
1304	500g	17,500

Copper (Ⅰ) Cyanide

청화동, Cuprous Cyanide
● CAS No. 544-92-3
● CuCN ● FW 89.56

Copper (Ⅰ) Cyanide — Extra Pure

Product No.	Packing	Price(₩)
1936	500g	17,500

Copper (Ⅰ) Cyanide — CP

Product No.	Packing	Price(₩)
1306	500g	17,500

Copper foil (0.1mm approx.) — Extra Pure

NEW

동호일
● CAS No. 7440-50-8
● Cu ● FW 63.55

Product No.	Packing	Price(₩)
5133	25g	22,500

Copper(Ⅱ) hydroxide carbonate
→ *go to Copper(II) Carbonate Basic*

Copper (I) iodide CP

아이오딘화동, Copper monoiodide, Cuprous iodide
● CAS No. 7681-65-4 ● EC No. 235-113-6
● CuI ● FW 190.45

● Spec. density 5.26 g/cm³(20℃) ● Solub. in H_2O 0.08 g/l (18℃) ● Melting point 602℃ ● Bulk density ~1400 kg/cm³ ● Boiling point 1290℃ (1013 hPa)

● IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER(I)-IODIDE), 9, III ● HS Code 2827 60 00
● Merck Index 10, 2655

Product No.	Packing	Price(₩)
1309	25g	9,800

Copper (I) Oxide CP

산화제일동, Cuprous Oxide
● CAS 1317-39-1 ● EC No 215-270-7
● Cu_2O ● FW 143.09

● Solub. in H_2O Negligible ● Melting point 1232℃ ● Boiling point 1800℃

● IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. 9, III
● HS Code 2825 50 00

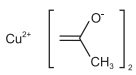
Product No.	Packing	Price(₩)
1311	500g	25,500

Copper (I) Thiocyanate CP

싸이오사이안산동(I), Cuprous Thiocyanate
● CAS No. 1111-67-7
● CuSCN ● FW 121.63

Product No.	Packing	Price(₩)
1318	25g	11,000

Copper(II) Acetate monohydrate



아세트산동 1수화물, Cupric Acetate monohydrate
● CAS No. 6046-93-1 ● EC No. 205-553-3
● $(CH_3COO)_2Cu \cdot H_2O$ ● FW 199.65

● Spec. density 1.88 g/cm³ (20℃) ● Solub. in H_2O 72 g/l (20℃) ● pH value 5.2~5.5 (20 g/l, H_2O, 20℃)
● Melting point 115℃ ● Bulk density ~1100 kg/cm³

● IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER(II)-ACETATE), 9, III ● HS Code 2915 29 00
● Merck Index 10, 2613

Appearance ····· Red-purple crystals or crystalline powder with a little deliquescent.

Copper (I) Cyanide CP

Product No.	Packing	Price(₩)
1302	25g	3,800
3799	500g	30,000

Copper (I) Cyanide Extra Pure

Product No.	Packing	Price(₩)
4989	500g	30,000

Copper(II) Carbonate, basic CP

탄산동, 염기성, Copper(II) hydroxide Carbonate
● CAS No. 12069-69-1 ● EC No. 235-113-6
● $CuCO_3 \cdot Cu(OH)_2$ ● FW 221.11

● Spec. density 3.9~4.0 g/cm³ (25℃) ● Solub. in H_2O (20℃) insoluble ● pH value 8~9 (50 g/l, H_2O, 20℃)(slurry) ● Bulk density ~350 kg/cm³

● IMDG No Dangerous Good ● HS Code 2836 99 00
● Merck Index 10, 2620

Product No.	Packing	Price(₩)
1303	500g	22,500

Copper(II) Chloride dihydrate Extra Pure

염화제이동, Cupric Chloride dihydrate, Copper dichloride dihydrate
● CAS No. 10125-13-0 ● EC No. 231-210-2
● $CuCl_2 \cdot 2H_2O$ ● FW 170.48

● Spec. density 2.54 g/cm³ (25℃) ● Solub. in H_2O (20℃) insoluble ● pH value 8~9 (50 g/l, H_2O, 20℃)(slurry) ● Bulk density ~350 kg/cm³

● IMDG No UN2802 Copper Chloride, 8, III, Marine Pollutant: PP
● HS Code 2827 39 00
● RTECS GL7030000 ● Merck Index 10, 2622

Appearance ····· Blue-green crystals or crystalline powder to deliquescent.
Assay ····· Min 97.0%
Solubility in ethanol ····· To pass test
Solubility in dil. HCl ····· To pass test
Sulfate (SO_4) ····· Max 0.015%
Total Nitrogen (as N) ····· Max 0.005%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
1305	500g	16,300

Copper(II) Diammonium Chloride, dihydrate GR

염화동(II)암모늄2수화물, Cupric Ammonium Chloride dihydrate
● CAS No. 10060-13-6
● $Cu(NH_4)_2Cl_4 \cdot 2H_2O$ ● FW 277.45

Appearance ····· Blue-green crystals.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
Sulfate (SO_4) ····· Max 0.005%
Substances not precipitated by $(NH_4)_2S$(as SO_4) ····· Max 0.1%
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
1307	25g	6,000

C

C

Copper(Ⅱ) Nitrate trihydrate — Extra Pure

질산제이동, Cupric Nitrate trihydrate, Copper dinitrate trihydrate
● CAS No. 10031-43-3 ● EC No. 221-838-5
● $Cu(NO_3)_2 \cdot 3H_2O$ ● FW 241.60

● Spec. density 2.05 g/cm³ (20℃) ● Solub. in H_2O 2670 g/l (20℃) ● pH value ~3-4 (50 g/l, H_2O, 20℃) ● Melting point ~114℃ ● Bulk density ~1050 kg/cm³

● IMDG No UN1477 NITRATES, INORGANIC, N.O.S., 5.1, II, Segregation Group: 7 (Heavy metals and their salts (including their organometalic compounds))
● HS Code 2834 29 00
● RTECS GL7875000 ● Merck Index 10, 2633

Appearance	Blue crystal, deliquescent.
Assay	Min 99.0%
Solubility in water	To pass test
Solubility in ethanol	To pass test
Chloride (Cl)	Max 0.006%
Sulfate (SO_4)	Max 0.02%
Iron (Fe)	Max 0.02%

Product No.	Packing	Price(₩)
1310	500g	13,800

Copper (Ⅱ) Oxide

산화제이동, Cupric Oxide, Copper monoxide granulated
● CAS No. 1317-38-0 ● EC No. 215-269-1
● CuO ● FW 79.54

● Spec. density 6.48 g/cm³ (25℃) ● Solub. in H_2O (20℃) insoluble ● pH value ~7 (50 g/l, H_2O, 20℃) ● Melting point 1326℃ (decomposition) ● Bulk density ~500 kg/cm³

● IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER(II) OXIDE), 9,Ⅲ ● HS Code 2825 50 00
● RTECS GL7900000 ● Merck Index 10, 2657

Appearance	dark black powder or particles. Soluble in dilute nitric acid.
Free alkali	To pass test
Assay	Min 95.0%

Copper (Ⅱ) Oxide — CP

Product No.	Packing	Price(₩)
1916	500g	17,500

Copper (Ⅱ) Oxide — Extra Pure

Product No.	Packing	Price(₩)
1312	500g	17,500
5527	1kg	31,300

Copper(Ⅱ) Sulfate anhydrous — Extra Pure / AR

● CAS No. 7758-98-7
● $CuSO_4$ ● FW 159.6

Product No.	Packing	Price(₩)
4601	500g	24,000

Copper(Ⅱ) Sulfate pentahydrate — Extra Pure

황산동, Cupric Sulfate pentahydrate, Cupric monosulfate pentahydrate, Cupric vitriol pentahydrate
● CAS No. 7758-99-8 ● EC No. 231-847-6
● $CuSO_4 \cdot 5H_2O$ ● FW 249.68

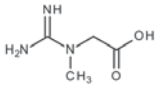
● Spec. density 2.284 g/cm³ (20℃) ● Solub. in H_2O 317 g/l (20℃) ● pH value 3.5~4.5 (50 g/l, H_2O, 20℃) ● Bulk density ~900-1200 kg/cm³

● IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER(II)-SULPHATE), 9,Ⅲ ● HS Code 2833 25 00
● RTECS GL8900000 ● Merck Index 10, 2645

Appearance	Blue crystals or crystalline powder.
Assay	Min 99.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.003%
Iron (Fe)	Max 0.007%
Total Nitrogen (as N)	Max 0.004%

Product No.	Packing	Price(₩)
1315	500g	8,800
1316	1kg	13,800
1317	20kg	225,000

Creatine Monohydrate — GR NEW



크레아틴 1수화물
● CAS No. 6020-87-7 ● EC No. 200-306-6
● $C_4H_9N_3O_2 \cdot H_2O$ ● FW 149.15

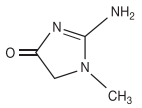
● Solub. in H_2O 17 g/l (20℃) slightly soluble ● pH value 6.9 (10 g/l, H_2O, 20℃) ● Melting point 296- 297 ℃ (de-composition) ● Bulk density 484 kg/m³

● IMDG NO Dangerous Good ● HS Code 2925 29 00

Appearance	White crystalline powder.
Assay	Min 99.0%
Solubility in water	To pass test
White crystalline powder	Max 0.05%

Product No.	Packing	Price(₩)
4944	25g	23,000

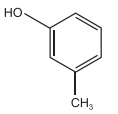
Creatinine — Extra Pure NEW



크레아티닌
● CAS No. 60-27-5
● $C_4H_7N_3O$ ● FW 113.12

Product No.	Packing	Price(₩)
5134	25g	24,000

m-Cresol — CP



메타-크레졸, 3-Hydroxytoluene, 3-Methylphenol
● CAS No. 108-39-4 ● EC No. 203-577-9
● $CH_3C_6H_4OH$ ● FW 108.14

● Vapour pressure 0.065 hPa (20℃) ● Spec. density 1.03 g/cm³ (20℃) ● Explosive limit 1 Vol% ● Flash point 86℃ c.c. (DIN51758) ● Solub. in H_2O 23.5 g/l (20℃) ● pH value ~5 (20 g/l, H_2O, 20℃) ● Melting point 11.5℃ ● Boiling point 203℃ ● Ignition temp. 626℃

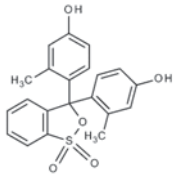
● IMDG UN2076 CRESOLE, FLUESSIG, 6.1 (8),II ● HS Code 2907 12 00
● RTECS GO6125000 ● 4류 제3석유류(비수용성액체) 2000ℓ
● Merck Index 10, 2565

Density (20℃)	1.034~1.038
Refractive index (n20D)	1.538~1.542
Assay (by GC)	Min 98.0%

Product No.	Packing	Price(₩)
1319	500g	9,800

NEW

m-Cresol Purple — Indicator



m-크레졸퍼플 지시약
● CAS No. 2303-01-7 ● EC No. 218-960-6
● $C_{21}H_{18}O_5S$ ● FW 382.43

● Solub. in H_2O (20℃) slightly soluble ● Bulk density ~ 480 kg/m³

● IMDG NO Dangerous Good ● HS Code 2934 99 90

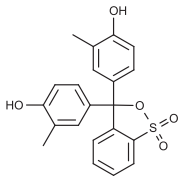
Assay (by GC)	Dark green powder.
Solubility in ethanol	To pass test
Solubility in NaOH Solution	To pass test
pH range 1.2~2.8	Red to yellow
pH range 7.4~9.0	Yellow to purple
Loss on drying (at 105℃, 2hr)	Max 1.0%
Ignition residue (as Sulfate)	Max 0.5%

Product No.	Packing	Price(₩)
4927	25g	142,500

m-Cresol Purple solution — Indicator solution

Product No.	Packing	Price(₩)
1320	500㎖	11,400

Cresol Red — Indicator



크레졸레드, o-Cresolsulfonphthalein
● CAS No. 1733-12-6 ● EC No. 217-064-2
● $C_{21}H_{18}O_5S$ ● FW 382.44

● Solub. in H_2O (20℃) slightly soluble ● Melting point 290℃ decomposes ● Bulk density ~600-620 kg/cm³

● IMDG No Dangerous Good ● HS Code 2934 99 00

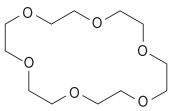
Product No.	Packing	Price(₩)
1321	25g	16,000

o-Cresolsulfophthalein → *go to Cresol Red*

Cromic oxide → *go to Chromium(III) Oxide*

NEW

18-Crown-6-Ether — Extra Pure



18-크라운-6
1,4,7,10,13,16-Hexaoxacyclooctadecane
● CAS No. 17455-13-9 ● EC No. 241-473-5
● $C_{12}H_{24}O_6$ ● FW 264.32

● Flash point 109℃ ● Melting point 36-39 ℃

● IMDG NO Dangerous Good ● HS Code 2932 99 85
● Merck Index 10, 2591

duct No.	Packing	Price(₩)
5135	25g	75,000

Cryolite — CP

빙정석, Artifical Cryolite
● CAS No. 15096-52-3 ● EC No. 239-148-8
● $AlF_3 \cdot 3NaF$ ● FW 209.94

● Spec. density 2.95 g/cm³ (29℃) ● Solub. in H_2O 0.3 g/l (20℃) ● pH value 5.0~6.0 (100 g/l, H_2O, 20℃)(Slurry) ● Melting point 1000℃ ● Bulk density ~1000-1200 kg/cm³

● IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (SODIUMHEXAFLUOROALUMINATE), 9, Ⅲ ● HS Code 2826 30 00

Product No.	Packing	Price(₩)
830	500g	7,000

Crystal violet Acentic Acid Solution — Anhydrous titration

Product No.	Packing	Price(₩)
2866	500㎖	34,500

CTMAB → *go to N-Cetyl-N,N,N Trimethyl Ammonium Bromide*

Cupric oxide → *go to Cesium Copper(II) Oxide*

Cupric acetate monohydrate
→ *go to Copper(II) Acetate monohydrate*

Cupric ammonium chloride dihydrate
→ *go to Copper(II) Diammonium Chloride dihydrate*

Cupric chloride dihydrate → *go to Copper(II) Chloride dihydrate*

Cupric nitrate trihydrate → *go to Copper(II) Nitrate trihydrate*

Cupric sulfate pentahydrate
→ *go to Copper(II) Sulfate Pentahydrate*

Cuprous Chloride → *go to Copper(I) chloride*

Cuprous Cyanide → *go to Copper(I) Cyanide*

Cuprous iodide → *go to Copper(I) Iodide*

Cuprous Oxide → *go to Copper(I) Oxide*

Cuprous thiocyanate → *go to Copper(I) Thiocyanate*

Cyanoguanidine → *go to Dicyandiamide*

C

C

Cyclohexane

사이클로핵세인, Hexahydrobenzen, Hexamethylene, Naphthene
● CAS No. 110-82-7 ● EC No. 203-806-2
● C_6H_{12} ● FW 84.16

● Vapour pressure 103 hPa (20℃) ● Spec. density 0.78 g/cm³ (20℃) ● Explosive limit 1.2~8.3 Vol% ● Flash point -18℃ c.c. (DIN51755) ● Solub. in H_2O 55 mg/l (20℃) ● Melting point 6℃ ● Boiling point 81℃ (1013 hPa) ● Ignition temp. 260℃

● IMDG UN1145 CYCLOHEXANE, 3, II ● HS Code 2902 11 00
● RTECS GU6300000 ● 4류 제1석유류(비수용성액체) 200ℓ

Cyclohexane — Extra Pure

Appearance	Clear, Colourless liquid.
Assay (by GC)	Min 99.0%
Freezing point	5.5~10.0℃
Density at. 20℃	0.778~0.785 g/ml
Water	Max 0.3%
Residue after evaporation	Max 0.01%
Substances reducing permanganate	To pass test

Product No.	Packing	Price(₩)
1328	500㎖	5,000
1329	1ℓ	8,800
1330	18ℓ	67,500
2781	200ℓ	Call

Cyclohexane — GR

Product No.	Packing	Price(₩)
3869	2.5ℓ	20,500
3578	4ℓ	21,300

Cyclohexane — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry

Maximum UV Absorbance	
202 nm	Max 1.00
205 nm	Max 0.88
210 nm	Max 0.67
254 nm	Max 0.01
UV Cutoff	Max 202 nm
Assay (by GC)	Min 99.7%
Color (APHA)	Max 10
Water	Max 0.01%
Residue after evaporation	Max 5 ppm
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
1331	4ℓ	45,000

Cyclohexane — PESTICIDE

Extraction-Concentration Suitability

ECD Detectable residue (as Heptachlor epoxide)	Max 10 ppt
Assay (by GC)	Min 99.7%
Color (APHA)	Max 10
Water	Max 0.01%
Residue after Evaporation	Max 5 ppm

Product No.	Packing	Price(₩)
1332	4ℓ	52,500

Cyclohexanone

사이클로헥세인온(아논), Primelic ketone
● CAS No. 108-94-1 ● EC No. 203-631-1
● $C_6H_{10}O$ ● FW 98.14

● Refractive index 1.4507 (20℃) ● Vapour pressure ~4.5 hPa (20℃) ● Spec. density 0.95 g/cm³ (20℃) ● Explosive limit 1.3~9.4 Vol% ● Flash point 43℃ c.c. (DIN51755) ● Solub. in H_2O 90 g/l (20℃) ● pH value ~7 (70 g/l, H_2O, 20℃) ● Saturation conc. 19 g/cm³ ● Melting point -31℃ ● Boiling point ~155℃ ● Ignition temp. 430℃ (DIN51794)

● IMDG UN1915 CYCLOHEXANONE, 3, III ● HS Code 2914 22 00
● 4류 제2석유류(비수용성액체) 1000ℓ

Cyclohexanone — Extra Pure

Appearance	Clear or light yellow liquid, Characteristic odor.
Assay (by GC)	Min 99.0%
Solubility in water	To pass test
Density (20℃)	0.944~0.948 g/ml
Water	Max 0.5%
Acidity (as CH_3COOH)	Max 0.02%

Product No.	Packing	Price(₩)
1324	500㎖	7,000
1325	1ℓ	11,000
1326	18ℓ	90,000

Cyclohexanone — GR

Appearance	Clear or light yellow liquid, Characteristic odor.
Assay (by GC)	Min 99.0%
Solubility in water	To pass test
Density (20℃)	0.944~0.948 g/ml
Refractive index (n 20 D)	1.449~1.453
Water	Max 0.3%
Residue after evaporation	Max 0.05%
Acidity (as CH_3COOH)	Max 0.01%

Product No.	Packing	Price(₩)
1323	500㎖	8,000
3058	1ℓ	12,000
3833	2.5ℓ	23,500

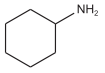
Cyclohexanone — ACS

Assay	Min 99.0%
Color (APHA)	Max 10
Residue after evaporation	Max 0.05%
Water (H_2O)	Max 0.05%

Product No.	Packing	Price(₩)
3388	4ℓ	28,800

Cyclohexatriene → *go to Benzene*

Cyclohexylamine — GR



사이클로헥실아민, Aminocyclohexane, Cyclohexanamine
● CAS No. 108-91-8 ● EC No. 203-629-0
● $C_6H_{11}NH_2$ ● FW 99.18

● Vapour pressure 14 hPa (20℃) ● Spec. density 0.87 g/cm³ (20℃) ● Explosive limit 1.6~9.4 Vol% ● Flash point 27℃ ● Solub. in H_2O (20℃) soluble ● pH value 11.5 (100 g/l, H_2O, 20℃) ● Melting point -18℃ ● Boiling point 133~134℃ ● Ignition temp. 265℃

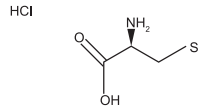
● IMDG UN2357 CYCLOHEXYLAMINE, 8 (3),II ● HS Code 2921 30 00
● RTECS GX0700000 ● 4류 제2석유류(수용성액체) 200ℓ
● Merck Index 10, 2723

Appearance ····· Clear to yellowish liquid.
Assay (by GC) ····· Min 99.0%
Water ····· Max 0.5%
Specific gravity (at 20℃) ····· 0.864 ~ 0.868
Refractive index (at 20℃) ····· 1.458 ~ 1.461
Ignition residue (as Sulfate) ····· Max 0.01%
Solubility in Water ····· To pass test

Product No.	Packing	Price(₩)
1333	500g	11,300
5039	18ℓ	150,000

Cyclohexylmethane → *go to Methyl Cyclohexane*

L-Cysteine Hydrochloride monohydrate GR



시스테인염산, 3-Mercapto-2-aminopropionic acid hydrochloride
● CAS No. 7048-04-6 ● EC No. 200-157-7
● HSCH2CH(NH2)COOH·HCl·H_2O
● FW 175.65

● Solub.in H_2O 650g/l(20℃) ● pH value 0.8-1.2(100g/l, H_2O, 20℃) ● Melting point ~168-170℃ ● Bulk density ~780kg/m^3

● IMDG No Dangerous Good
● HS Code 2930 90 16 ● RTECS HA2285000

Product No.	Packing	Price(₩)
1335	25g	8,800

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

D

Alphabetical list Numbers

List of D

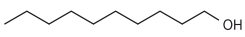
Product	Page
Decahydronaphthalene	113
1–Decanol	113
Decyl Alcohol	113
Devardas Alloy	113
DEG	113
Dextrine	113
Dextrose anhydrous	113
Diacetone alcohol	113
1,2–Diaminoethane	113
Diammonium adipate	113
Diammonium hydrogen citrate	113
Diammonium (+)–Tartrate	113
Diamond green G	113
Diastase(fungal)	114
Dibutyl Phthalate	114
Dibutylamine	114
o–Dichlorobenzene	114
p–Dichlorobenzene	114
1,4–Dichlorobenzene	114
1,2–Dichloroethane	115
2,6–Dichloroindophenol Sodium salt	115
Dichloromethane	115
Dicyandiamide	115
N,N'–Dicyclohexylcarbodiimide	115
Diethanolamine	115
Diethylamine	115
Diethyl Ammonium–N,N–Diethyldithiocabamate	116
Diethyl Carbonate	116
Diethyl ether	116
Diethyl Phthalate	116
Diethyl Sulfate	116
Diethylene dioxide	116
Diethylene Glycol	116
Diethylene glycol dimethyl ether	116
Diethylene glycol monobutyl ether	117
Diethylene glycol monobutyl ether acetate	117
Diethylene glycol monoethyl ether	117
Diethylene glycol monoethyl ether acetate	117
Diethylene triamine	117
Diglyme	117
2,2–Dihydroxy–1,3–dioxohydrindene	117
1,2–Dihydroxyanthraquinone	117
1,3–Dihydroxybenzene	117
Diisopropyl ether	117
N,N–Diisopropylethylamine	117
1,2–Dimethoxyethane	117
N,N–Dimethyl Acetamide	117
p–Dimethylaminobenzaldehyde	118

Product	Page
2–Dimethylaminoethanol	118
4–Dimethylaminopyridine	118
N,N–Dimethylaniline	118
Dimethylbenzene	118
N,N–Dimethylethanolamine	118
Dimethyl Carbonate	118
N,N–Dimethyl Formamide	119
Dimethyl ketone	119
N,N–Dimethyl p–Phenylenediamine dihydrochloride	119
Dimethyl phthalate	119
1,3–Dimethyl propane	119
Dimethyl Sulfate	120
Dimethyl Sulfoxide	120
2,4–Dinitrophenol	120
2,4–Dinitrophenol solution	121
2,4–Dinitrophenyl hydrazine	121
3,5–Dinitirososalicylic acid	121
Dioctyl Phthalate	121
1,4–Dioxane	121
1,3–Dioxolane	122
Diphenylamine	122
Diphenylamine solution	122
1,5–Diphenylcarbazide	122
Diphenyl Carbazone	122
Diphenyl Ether	122
Diphosphoric acid	122
α,α'–Dipyridyl	122
Dipotassium hydrogen phosphate	122
Disodium Hydrogen Phosphate anhydrous	122
Disodium hydrogen phosphate dibasic 12–water	122
Disodium oxalate	122
Disodium succinate hexahydrate	122
DMAC	122
DMF	122
DMP	122
DMSO	122
Dodecanoic acid	122
Dodecyl alcohol	122
Dodecylbenzenesulphonic acid Sodium salt	123
DOP	123
Dotite–N,N Diluted with K_2SO_4	123
Drierite	123

Decahydronaphthalene → *go to Decalin*

NEW

1-Decanol GR



1-데카놀
Capric alcohol, Decyl alcohol
● CAS No. 112-30-1 ● EC No. 203-956-9
● $C_{10}H_{22}O$ ● FW 158.29

● Vapour pressure 〈 0.1 hPa (20℃) ● Spec. density 0.829 g/cm³ (20℃) ● Explosive limits 0.6 Vol% ● Flash point 95℃ (DIN 51758) ● Solub.in H_2O 0.037 g/l (25℃) ● Melting point 5-7℃ ● Boiling point 220-235 ℃ (1013 hPa) ● Ignition temp. 255℃

● IMDG NO UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(1-DECANOL), 9, Ⅲ ● HS Code 2905 19 00 ● Merck Index 10, 2591
● 제4류 3석유류(비수용성 액체), 2000ℓ

Product No.	Packing	Price(₩)
5136	1ℓ	17,500

Decyl Alcohol → *go to 1-Decanol*

DEG → *go to Diethylene Glycol*

NEW

Devardas Alloy GR /AR

● CAS No. 8049-11-4

● Spec. density ~5.79 g/cm³(20℃) ● Solub. in H_2O (20℃) insoluble ● Melting point 490 - 560 ℃ ● Bulk density ~2080 kg/m³ ● Boiling point 906 ℃

● IMDG UN3089 METAL POWDER, FLAMMABLE, N.O.S., 4.1, Ⅱ
● HS Code 7403 29 00 ● Merck Index 10, 2905

Appearance ····· Gray colored powder.
Ammonium & Nitrate (as NH_4) ····· Max 0.002%

Product No.	Packing	Price(₩)
5069	25g	7,500

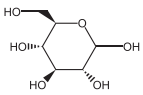
Dextrine CP

덱스트린
● CAS No. 9004-53-9
● $(C_6H_{10}O_5)_n \cdot {}_nH_2O$ ● FW (162.14)n

Appearance ····· White ~ pale yellow powder.
Solubility in water ····· To pass test
Loss on drying (at silicagel) ····· Max 10.0%
Ignition residue (as Sulfate) ····· Max 0.5%
Acidity (as CH_3COOH) ····· To pass test
Chloride (Cl) ····· Max 0.01%
Reducing sugars ····· Max 10.0%

Product No.	Packing	Price(₩)
90	500g	9,400

Dextrose anhydrous Extra Pure



포도당, 무수, D(+)-Glucose
● CAS No. 50-99-7 ● EC No. 200-075-1
● $C_6H_{12}O_6$ ● FW 180.16

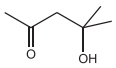
● Solub. in H_2O 470 g/l (20℃) ● Melting point~146℃
● Bulk density ~630 kg/cm³ ● Ignition temp. ~500℃

● IMDG No Dangerous Good
● HS Code 1702 30 51 ● RTECS LZ6600000

Appearance (APHA) ····· White crystal or crystalline powder.
Assay ····· Min 98.0%
Specific rotation (α) 20 D ····· +52.5 ~ +53.2
Solubility in water ····· To pass test
Loss on drying (at 105℃, 6hr.) ····· Max 1.0%
Ignition residue (as Sulfate) ····· Max 0.1%
Acidity (as CH_3COOH) ····· Max 0.007%
Chloride (Cl) ····· Max 0.02%
Sulfate, Sulfite (as SO_4) ····· Max 0.025%
Lead (Pb) ····· Max 5ppm
Arsenic (As) ····· Max 1ppm
Dextrine & starch ····· To pass test

Product No.	Packing	Price(₩)
89	500g	4,400
763	20kg	62,000

Diacetone alcohol Extra Pure



다이아세톤알콜, 4-Hydroxy-4-Methyl-2-Pentanone
● CAS 123-42-2 ● EC No 204-626-7
● $(CH_3)_2C(OH)CH_2COCH_3$ ● FW 116.16

● Refractive index 1.423 (20℃) ● Vapour pressure 1.1hPa (20℃) ● Spec. density 0.94 g/cm³(20℃) ● Explosive limit 1.8~6.9 Vol % ● Solub.in H_2O Soluble ● Boiling point 168℃

● IMDG UN1148 DIACETONE ALCOHOL, 3, Ⅲ ● HS Code 2914 40 10
● 4류 제2석유류 (비수용성 액체) 2000ℓ

Appearance ····· Colorless liquid and sweet smell.
Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 0.938 ~ 0.942g/ml
Refractive index (n 20 D) ····· 1.422 ~ 1.426
Water ····· Max 0.2%
Acidity (as CH_3COOH) ····· Max 0.01%

Product No.	Packing	Price(₩)
1159	500㎖	6,500
1950	18ℓ	106,300

1,2-Diaminoethane → *go to Diethylene Glycol*

Diammonium adipate → *go to Ammonium Adipate*

Diammonium hydrogen citrate → *go to Ammonium Citrate dibasic*

Diammonium (+)-Tartrate → *go to Ammonium (+)-Tartrate*

Diamond green G → *go to Brilliant green*

D

D

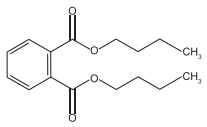
Diastase(fungal) — Extra Pure

NEW

디아스타즈
● CAS No. 9000-92-4

Product No.	Packing	Price(₩)
5137	25g	5,000
5138	500g	28,500

Dibutyl Phthalate — Extra Pure



다이부틸프탈레이트, Phthalic acid dibutyl ester
● CAS No. 84-74-2 ● EC No. 201-557-4
● $C_6H_4[COO(CH_2)_3CH_3]_2$ ● FW 278.35

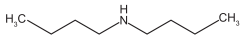
● Vapour pressure<0.1 hPa(20℃) ● Spec. density 1.05g/cm³(20℃) ● Flash point~160℃(DIN51758) ● Solub.in H_2O 11 g/l(20℃) ● pH value(10mg/l, 20℃)neutral ● Melting point-35℃ ● Boiling point ~340℃(1013hPa) ● Ignition temp. 390℃(DIN51794)

● IMDG UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (DIBUTYLPHTHALATE), 9, Ⅲ, Marine Pollutant:P
● HS Code 2917 34 10 ● RTECS TI0875000 ● Merck Index 10, 1559
● 4류 제3석유류 (비수용성 액체) 2000ℓ

Appearance ····· Colorless to yellow and has a strange odor.
Density (20℃) ····· 1.045 ~ 1.051g/ml
Refractive index (n 20 D) ····· 1.488 ~ 1.494
Ignition residue (as Sulfate) ····· Max 1.0%
Acid value ····· Max 0.07
Ester Value ····· 400 ~ 407
after Boiling Acid Value ····· Max 0.2

Product No.	Packing	Price(₩)
1340	500㎖	8,800
1341	1ℓ	12,000
1342	18ℓ	120,000

Dibutylamine — Extra Pure



디부틸아민, N-Butyl-1-butanamine
● CAS No. 111-92-2 ● EC No. 203-921-8
● $(CH_3(CH_2)_3)_2NH$ ● FW 129.24

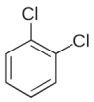
● Vapour pressure2.3hPa(20℃) ● Spec. density 0.76 g/cm³(20℃) ● Explosive limit0.6-6.8Vol% ● Flash point39℃c.c.(DIN 51755) ● Solub.in H_2O 4.05g/l(25℃) ● pH value11.1(1 g/l, H_2O, 20℃) ● Melting point-62℃ ● Boiling point ~160℃(1013 hPa) ● Ignition temp.260℃(DIN51794)

● IMDG UN 2248 DI-N-BUTYLAMINE, 8(3), Ⅱ
● HS Code 2921 19 80 ● Merck Index 10, 3013
● 4류 제2석유류 (비수용성 액체) 1000ℓ

Assay ····· Min 99.0%
Color(APHA) ····· Max 20
Water ····· : Max 0.1%

Product No.	Packing	Price(₩)
4895	1ℓ	26,300

o-Dichlorobenzene



오쏘-이염화벤젠, 1,2-Dichlorobenzene
● CAS No. 95-50-1 ● EC No. 202-425-9
● $C_6H_4Cl_2$ ● FW 147.00

● Vapour pressure 1.33hPa (20℃) ● Spec. density 1.31g/cm³ (20℃) ● Explosive limit 2.2-12Vol% ● Flash point 66℃c.c.(DIN 51758) ● Solub.in H_2O (20℃) almost insoluble ● Saturation conc.8g/m³(20℃) ● Melting point -17℃ ● Boiling point 180℃ ● Ignition temp. 640℃

● IMDG UN 1591 ORTHO-DIchlorobenzene, 6.1 Ⅲ
● HS Code 2903 61 00 ● Merck Index 10, 3040

o-Dichlorobenzene — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
296 nm ····· Max 1.00
300 nm ····· Max 0.30
325 nm ····· Max 0.10
350 nm ····· Max 0.05
400 nm ····· Max 0.01
UV Cutoff ····· Max 296nm
Assay (by GC) ····· Min 98.0%
Color (APHA) ····· Max 30
Water ····· Max 0.02%
Residue after evaporation ····· Max 5ppm
Acidity (as HCl) ····· Max 0.005%

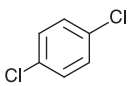
Product No.	Packing	Price(₩)
1680	4ℓ	112,500

o-Dichlorobenzene — Extra Pure

Appearance ····· Colorless liquid. Unique oder.
Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 1.304 ~ 1.309g/ml
Refractive Index (n 20 D) ····· 1.551 ~ 1.553
Water ····· Max 0.03%
Residue after evaporation ····· Max 5 ppm
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
1343	500g	8,000
5938	1kg	13,100

p-Dichlorobenzene — Extra Pure



파라-이염화벤젠, 1,4-Dichlorobenzene
● CAS No. 106-46-7 ● EC No. 203-400-5
● $C_6H_4Cl_2$ ● FW 147.00

● Vapour pressure 0.8hPa (20℃) ● Spec. density 1.23 g/cm³(70℃) ● Explosive limit 1.7-5.9Vol% ● Flash point 66℃c.c. ● Solub.in H_2O 0.08g/l (25℃) ● pH value 7 (0.06g/l, H_2O, 20℃) ● Saturation conc. 5g/m³(20℃) ● Melting point 52-54℃ ● Bulk density 800kg/m³ ● Boiling point 173-175℃ ● Ignition temp. >500℃

● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,4-DICHLOROBENZENE), 9, Ⅲ, Marine Pollutant: P
● HS Code 2903 61 00 ● Merck Index 10, 3041

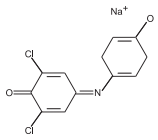
Product No.	Packing	Price(₩)
1263	500g	7,900

1,4-Dichlorobenzene → *go to p-Dichlorobenzene*

1,2-Dichloroethane → *go to Ethylene Dichloride*

NEW

2, 6 - Dichlorophenolindophenol Sodium Salt GR / AR / ACS



2,6-디클로로인도페놀 나트륨염 수화물

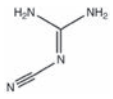
- CAS No. 620-45-1 • EC No. 210-640-4
- $C_{12}H_6Cl_2NNaO_2 \cdot 2H_2O$ • FW 326.11
- Solub.in H_2O (20℃) slightly soluble • Bulk density 320 kg/m³
- IMDG NO Dangerous Good • HS Code 2925 29 00
- Merck Index 10, 3052

Appearance ····· A Dark green hygroscopic powder.
Assay ····· Min 99.0%
Loss on drying ····· Max 12.0%

Product No.	Packing	Price(₩)
4921	25g	120,000

Dichloromethane → *go to Methylene Chloride*

Dicyandiamide Extra Pure



다이사이안 다이아미드, Cyanoguanidine

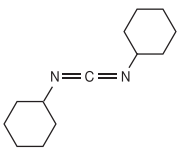
- CAS No. 461-58-5
- $NCN=C(NH_2)_2$ • FW 84.08
- Spec. density 1.4g/cm³(20℃) • Solub.in H_2O 34.6 g/l(20℃) • Melting point 208-210℃
- Bulk density 400 kg/m³
- IMDG No dangerous Good
- HS Code 2926 20 00 • Merck Index 10, 3077

Appearance ····· white crystalline and odorless.
Assay ····· Min 99.0%
Melting point ····· 208 ~ 212℃
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.03%
Water ····· Max 0.3%
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
1322	500g	8,800

NEW

N,N'-Dicyclohexylcarbodiimide Extra Pure

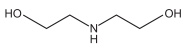


NN-디사이클로헥실카르보디이미드, DCC

- CAS No. 538-75-0 • EC No. 208-704-1
- $C_{13}H_{22}N_2$ • FW 206.33
- Spec. density 1.48 g/cm³ (40 ℃) • Solub. in H_2O 10 g/l (20 ℃) insoluble • Melting point 35 – 36 ℃ • Flash point 113 ℃ • Bulk density ~ 920 kg/m³ • Boiling point 148 – 152 ℃ (15 hPa)
- IMDG UN 2811 TOXIC SOLID, ORGANIC, N.O.S.(N,N-DICYCLOHEXYLCARBODIIMIDE), 6.1, II • HS Code 2925 29 00
- RTECS FF2160000 • Merck Index 10, 3081
- 제4류 3석유류

Product No.	Packing	Price(₩)
5139	25g	16,500

Diethanolamine Extra Pure



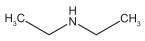
다이에탄올아민, 2,2-Iminodiethanol

- CAS No. 111-42-2 • EC No. 203-868-0
- $NH(CH_2CH_2OH)_2$ • FW 105.14
- Vapour pressure<0.01 hPa(25℃) • Spec. density 1.09 g/cm³(30℃)(liquid) • Explosive limit2.1-10.6 Vol% • Flash point176℃(DIN51758) • Solub.in H_2O(20℃) freely soluble • pH value~11(53 g/l, H_2O, 20℃) • Melting point28℃ • Boiling point -270℃(1013hPa) • Ignition temp. 260-370℃(DIN51794)
- IMDG UN 2735 AMINES, LIQUID, CORROSIVE, N. O. S.(DIETHANOLAMINE), 8, III
- HS CODE 2922 12 00 • MERCK INDEX 10, 3087

Appearance ····· Colorless ~ pale yellow viscous liquid that is hygroscopic.
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Refractive index (n 20 D) ····· 1.474 ~ 1.479
Water ····· Max 1.0%
Ignition residue (as Sulfate) ····· Max 0.01%

Product No.	Packing	Price(₩)
1170	500g	8,800
2878	20kg	125,000

Diethylamine



다이에틸아민, N-Ethylethanamine

- CAS No. 109-89-7 • EC No. 203-716-3
- $C_4H_{11}N$ • FW 73.14
- Vapour pressure253hPa(20℃) • Spec. density 0.71 g/cm³(20℃) • Explosive limit2.0-11.8Vol% • Flash point23℃(DIN 51755) • Solub.in H_2O(20℃) freely soluble • pH value13(100 g/l, H_2O, 20℃) • Melting point-50℃ • Boiling point 56℃(1013 hPa) • Ignition temp.29℃(DIN51794)
- IMDG UN 1154 DIETHYLAMINE, 3 (8), II
- HS Code 2921 19 50 • Merck Index 10, 3090
- 4류 제1석유류 (수용성액체) 400ℓ

Diethylamine Extra Pure

Appearance ····· Colorless liquid ammonia smell.
Assay (by GC) ····· Min 99.5%
Solubility in water ····· To pass test
Density (20℃) ····· 0.703 ~ 0.709g/ml
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.001%

Product No.	Packing	Price(₩)
1347	500mℓ	6,900
1348	1 ℓ	11,000
1349	18 ℓ	101,500

Diethylamine GR

Appearance ····· Colorless liquid ammonia smell.
Assay (by GC) ····· Min 99.5%
Solubility in water ····· To pass test
Density (20℃) ····· 0.704 ~ 0.708g/ml
Water ····· Max 0.2%
Residue after evaporation ····· Max 0.001%

Product No.	Packing	Price(₩)
1346	1 ℓ	15,600

D

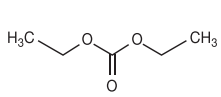
Diethyl Ammonium-N,N-Diethyldithiocabamate — Extra Pure

- CAS No. 1518-58-7
- $(C_2H_5)_2NCS_2NH_2(C_2H_5)_2$ • FW 222.42

Product No.	Packing	Price(₩)
1955	25g	16,300

NEW

Diethyl carbonate — GR



디에틸 카르보네이트, Ethyl Carbonate

- CAS No. 105-58-8 • EC No. 203-311-1
- $C_5H_{10}O_3$ • FW 118.13

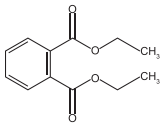
- Vapour pressure ~ 11hPa (20 ℃) • Spec. density 0.975 g/cm3 (20 ℃) • Explosive limit 1.4 – 11.0 Vol% • Flash point 33 ℃ c.c. • Solub. in H_2O 18.8 mg/l (20℃) (experimental) • pH value ~6.3 (1g/l, H_2O) • Saturation conc. 64 g/m³ (20 ℃) • Melting point −43 ℃ • Boiling point 126 ℃ • Ignition temp. 445 ℃

- IMDG UN 2366 DIETHYL CARBONATE, 3, III • HS Code 2920 90 10
- RTECS FF9800000 • Merck Index 10, 3727
- 제4류 2석유류

Product No.	Packing	Price(₩)
5140	1 ℓ	45,000

Diethyl ether → *go to Ethyl Ether*

Diethyl Phthalate — Extra Pure



프탈산다이에틸, Ethyl Phthalate

- CAS No. 84-66-2 • EC No. 201-550-6
- $C_6H_4(COOC_2H_5)_2$ • FW 222.24

- Vapour pressure 0.002 hPa(20℃) • Spec. density 1.12 g/cm³(20℃) • Explosive limit 0.75 Vol% • Flash point 156℃(DIN 51758) • Solub.in H_2O 0.928 g/l (20℃) • pH value7(20℃) • Melting point−3℃ • Boiling point 296-298℃(1013 hPa) • Ignition temp. 430℃(DIN 51794)

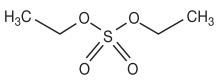
- IMDG No Dangerous Good
- HS Code 2917 34 90 • RTECS TI1050000 • Merck Index 10, 7255
- 4류 제3석유류 (비수용성 액체) 2000ℓ

Appearance ····· Colorless, odorless liquid.
Assay (by GC) ····· Min 99.0s%
Density (20℃) ····· 1.117 ~ 1.123g/ml
Refractive index (n 20 D) ····· 1.501 ~ 1.504
Water ····· Max 0.3%
Ignition residue (as Sulfate) ····· Max 0.005%
Acid as $C_6H_4(COOH)_2$ ····· Max 0.005%
Lead (Pb) ····· Max 5ppm
Iron(Fe) ····· Max 5ppm

Product No.	Packing	Price(₩)
1956	500g	12,500
1957	1kg	25,000

Diethyl sulfate — GR

NEW



디에틸황산

- CAS No. 64-67-5 • EC No. 200-589-6
- $C_4H_{10}O_4S$ • FW 154.19

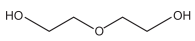
- Vapour pressure 0.25 hPa (20 ℃) • Spec. density 1.174 g/cm³ (20 ℃) • Explosive limit 1.8 – 12.2 Vol% • Flash point 104 ℃ c.c. • Solub. in H_2O 7 g/l (20℃) (rigorous reaction) • Melting point −25 ℃ • Boiling point 208 ℃ (1013 hPa) (decomposition) • Ignition temp. 436 ℃

- IMDG UN 1594 DIETHYL SULPHATE, 6.1, II • HS Code 2920 90 10
- RTECS WS7875000 • Merck Index 10, 3117
- 제4류 3석유류

Product No.	Packing	Price(₩)
5141	1 ℓ	18,000

Diethylene dioxide → *go to 1,4-Dioxane*

Diethylene Glycol — Extra Pure



다이에틸렌글리콜, DEG, 2-Hydroxyethyl Ether

- CAS No. 111-46-6 • EC No. 203-872-2
- $(HOCH_2CH_2)_2O$ • FW 106.12

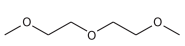
- Vapour pressure ~ 0.03 hPa(20℃) • Spec. density 1.1184 g/cm³(20℃)(DIN 51751) • Explosive limit 0.7-22 Vol% • Flash point 140℃c.c.(DIN 51758) • Solub.in H_2O (20℃)freely soluble • pH value 6-8(200 g/l, H_2O, 20℃) • Saturation conc. 0.12 g/cm³(20℃) • Melting point−9℃(DIN 5183) • Boiling point 242-247℃(1013hPa) • Ignition temp. 345℃(DIN51758)

- IMDG No dangerous Good
- HS Code 2909 41 00 • RTECS ID55950000 • Merck Index 10, 3104
- 4류 제3석유류 (비수용성 액체) 4000ℓ

Appearance ····· Colorless, practically odorless, poisonous, viscous, and hygroscopic liquid with a sweetish taste.
Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 1.115 ~ 1.118g/ml
Water ····· Max 0.2%
Ignition residue (as Sulfate) ····· Max 0.02%
Acidity (as CH_3COOH) ····· Max 0.1%

Product No.	Packing	Price(₩)
1152	500g	7,000
1153	1kg	10,000
1154	20kg	72,500

Diethylene glycol dimethyl ether — GR



2-Methoxyethyl ether, Diglyme

- CAS No. 111-96-6 • EC No. 203-924-4
- $C_6H_{14}O_3$ • FW 134.17

- Refractive index 1.4097 (20℃, 589nm) • Vapour pressure 2hPa (20℃) • Spec. density 0.944 g/cm³ (20℃) • Explosive limit 1.4 ~ 17.4%(V) • Flash point 51℃ • Solub.in H_2O soluble • pH value neutral (H_2O, 20℃) • Melting point 64℃ • Boiling point 155~165℃ (1013hPa)

- IMDG UN3271 ETHERS, N.O.S. (DIETHYLENGLYCOLDIMETHYLETHER), 3, III
- HS Code 2909 19 90 • RTECS KN3339000 • 4류 2석유류 (수용성 액체) 2000ℓ

Appearance ····· Clear, Colorless liquid.
Assay (by GC) ····· Min 99.0%

Water ····· Max 0.1%
Color (APHA) ····· Max 15
Speccific gravity (at 20℃) ····· 0.944 ~ 0.948 g/ml
Refractive index (at 20℃) ····· 1.407 ~ 1.410
Acidity (as CH_3COOH) ····· Max 0.001%
Solubility in water ····· To pass test

Product No.	Packing	Price(₩)
3844	1 ℓ	30,000

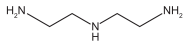
Diethylene glycol monobutyl ether → *go to Butyl Carbitol*

Diethylene glycol monobutyl ether acetate
→ *go to Butyl Carbitol Acetate*

Diethylene glycol monoethyl ether → *go to Ethyl Carbitol*

Diethylene glycol monoethyl ether acetate
→ *go to Ethyl Carbitol Acetate*

Diethylene triamine GR



다이에틸렌트리아민, 2,2'-Iminobis(ethylamine)
● CAS No. 111-40-0 ● EC No. 203-865-4
● $H_2NCH_2CH_2NHCH_2CH_2NH_2$ ● FW 103.17

● Vapour pressure ~ 0.5 hPa(20℃) ● Spec. density 0.95 g/cm³(20℃) ● Explosive limit 4.4-16.1 Vol% ● Flash point 97℃(DIN 51758) ● Solub.in H_2O (20℃) soluble ● pH value >12 (100 g/l, H_2O, 20℃) ● Melting point-35℃ ● Boiling point 206-209℃ ● Ignition temp. 325℃(DIN 51794)

● IMDG UN 2079 DIETHYLENETRIAMINE, 8, II
● HS Code 2921 29 00
● 4류 제3석유류 (비수용성 액체) 4000ℓ

Appearance ····· Hygroscopic, colorless, Viscous liquids. Strongly alkaline.
Density (20℃) ····· 0.950 ~ 0.955g/ml
Refractive index (n 20 D) ····· 1.483 ~ 1.486
Water ····· Max 0.5%
Ignition residue (as Sulfate) ····· Max 0.01%
Assay ····· Min. 98.5%

Product No.	Packing	Price(₩)
1359	500㎖	12,000
1959	18 ℓ	225,000

Diglyme → *go to Diethylene glycol dimethyl ether*

2,2-Dihydroxy-1,3-dioxohydrindene → *go to Ninhydrine*

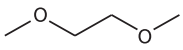
1,2-Dihydroxyanthraquinone → *go to Alizarin*

1,3-Dihydroxybenzene → *go to Resorcinol*

Diisopropyl ether → *go to Iso-Propyl Ether*

N,N-Diisopropylethylamine → *go to N-Ethyldiisopropylamine*

1,2-Dimethoxyethane GR



Ethylene glycol dimethyl ether, Dimethyl diglycol, DME
● CAS No. 110-71-4 ● EC No. 203-794-9
● $CH_3OCH_2CH_2OCH_3$ ● FW 90.12

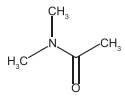
● Vapour pressure 67hPa (20℃) ● Spec. density 0.87 g/cm³ (20℃) ● Explosive limit 1.6 ~ 10.4%(V) ● Flash point -6℃ ● Solub.in H_2O soluble ● pH value neutral (H_2O) ● Melting point -69℃ ● Boiling point 84~86℃

● IMDG UN2252 1,2-DIMETHOXYETHANE, 3, II ● HS Code 2909 19 90
● RTECS KI1451000 ● 4류 1석유류 (수용성 액체) 400ℓ

Appearance ····· Bright & Clear.
Assay (by GC) ····· Min 99.0%
Water ····· Max 0.1%
Color (APHA) ····· Max 15
Acidity(as CH_3COOH) ····· Max 0.015%
Residue after evaporation ····· Max 0.002%
Density at 20℃ ····· 0.855 ~ 0.871
Refracitive index at 20℃ ····· 1.378 ~ 1.381
Peroxide(as H_2O_2) ····· Max 0.0025%

Product No.	Packing	Price(₩)
2970	1 ℓ	33,800

N,N-Dimethyl Acetamide



다이메칠아세타마이드, DMAC,
Acetic acid dimethylamide
● CAS No. 127-19-5 ● EC No. 204-826-4
● $CH_3CON(CH_3)_2$ ● FW 87.12

● Vapour pressure 1.76 hPa(20℃) ● Spec. density 0.94 g/cm³(20℃) ● Explosive limit 1.7-11.5 Vol% ● Flash point 70℃(DIN 51758) ● Solub.in H_2O (20℃) freely soluble ● pH value ~4 (200 g/l, H_2O, 20℃) ● Melting point-20℃ ● Boiling point 165-166℃ ● Ignition temp. 400℃(DIN51794)

● IMDG UN 2810 TOXIC LIQUID ORGANIC, N.O.S(N,N-DIMETHYLACETAMIDE), 6.1, III
● HS Code 2924 19 00 ● Merck Index 10, 3218

N,N-Dimethyl Acetamide EL

Assay ····· Min 99.8%
Pt/Co Color ····· Max 10
Water ····· Max 0.02%
Acidity (as CH_3COOH) ····· Max 80ppm
Alkalinity (as dimethylamine) ····· Max 5ppm
Aluminum (Al) ····· Max 50ppb
Calcium (Ca) ····· Max 50ppb
Chromium (Cr) ····· Max 50ppb
Copper (Cu) ····· Max 50ppb
Iron (Fe) ····· Max 50ppb
Lead (Pb) ····· Max 50ppb
Magnesium (Mg) ····· Max 50ppb
Manganese (Mn) ····· Max 50ppb
Nickel (Ni) ····· Max 50ppb
Potassium (K) ····· Max 50ppb
Sodium (Na) ····· Max 50ppb
Zinc (Zn) ····· Max 50ppb

Product No.	Packing	Price(₩)
2692	3.8 ℓ	65,000

D

D

N,N-Dimethyl Acetamide — Extra Pure

Appearance ····· Colorless liquid.
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Density (20℃) ····· 0.940 ~ 0.945g/ml
pH (20 % Sol, 25℃) ····· 4.0 ~ 7.0
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.02%

Product No.	Packing	Price(₩)
1361	500㎖	8,800
1362	1 ℓ	16,300
1363	18 ℓ	120,000

N,N-Dimethyl Acetamide — GR

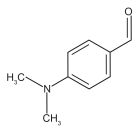
Product No.	Packing	Price(₩)
4246	2.5 ℓ	31,300

N,N-Dimethyl Acetamide — HPLC

Ultraviolet Spectrophotmetry
Maximum UV Absorbance
270 nm ····· Max 1.00
280 nm ····· Max 0.30
290 nm ····· Max 0.15
310 nm ····· Max 0.05
320 nm ····· Max 0.03
360 nm ····· Max 0.01
400 nm ····· Max 0.01
UV Cutoff ····· Max 270nm
Assay (by GC) ····· Min 99.8%
Water ····· Max 0.03%
Residue after evaporation ····· Max 5ppm

Product No.	Packing	Price(₩)
2964	4 ℓ	56,300

p-Dimethylaminobenzaldehyde — Extra Pure



파라-다이메틸아미노벤즈알데히드, p-Formyldimetylaniline
● CAS No. 100-10-7 ● EC No. 213-140-4
● $(CH_3)_2NC_6H_4CHO$ ● FW 149.19

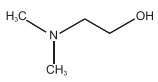
● Flash point >100℃ ● Solub.in H_2O 0.3g/l (20℃) ● Melting point 72-75℃ ● Bulk density ~350kg/m³ ● Boiling point 176-177℃(23hPa) ● Ignition temp. >445℃

● IMDG No Dangerous Good
● HS Code 2922 39 00 ● Merck Index 10, 3221

Product No.	Packing	Price(₩)
1365	25g	8,800

NEW

2-Dimethylaminoethanol — Extra Pure



N,N-디메틸에탄올아민, N,N-Dimethylethanolamine
● CAS No. 108-01-0 ● EC No. 203-542-8
● $C_4H_{11}NO$ ● FW 89.14

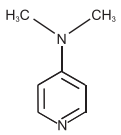
● Vapour pressure 6.12hPa (20℃) ● Spec. density 0.888 g/cm³ (20℃) ● Explosive limits 1.4 - 12.2 Vol% ● Flash point 39℃c.c.(DIN 51755) ● Solub.in H_2O (20℃) freely soluble ● Melting point -59 ℃ ● Boiling point 132 - 135℃ ● Ignition temp. 245 ℃ ● pH value 10.5 - 11 (100 g/l, H_2O, 20 ℃)

● IMDG UN 2051 2- DIMETHYLAMINOETHANOL, 8 (3), II ● HS Code 2922 19 80
● Merck Index 10, 2825 ●제4류 2석유류(수용성 액체), 2000ℓ

Product No.	Packing	Price(₩)
5145	1 ℓ	22,500

4-Dimethylaminopyridine — Extra Pure

NEW



4-디메틸아미노피리딘, DMAP
● CAS No. 1122-58-3 ● EC No. 214-353-5
● $C_7H_{10}N_2$ ● FW 122.17

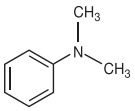
● Flash point 124 ℃(DIN 51758) ● Solub.in H_2O 60 g/l (20℃) ● Melting point 110 - 112 ℃ ● Boiling point 138~140 ℃ (24 hPa) ● Ignition temp. 420 ℃(DIN 51794) ● Bulk density ~ 520 kg/m³ ● pH value 11 (60 g/l, H_2O, 20 ℃)

● IMDG UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (4-(DIMETHYLAMINO)PYRIDINE), 6.1, II ● HS Code 2933 39 99

Product No.	Packing	Price(₩)
5144	25g	32,500

N,N-Dimethylaniline — Extra Pure / AR

NEW



NN-디메틸아닐린, DMA
● CAS No. 121-69-7 ● EC No. 204-493-5
● $C_8H_{11}N$ ● FW 121.18

● Vapour pressure 0.53 hPa (20 ℃) ● Spec. density 0.95 g/cm³ (20 ℃) ● Solub. in H_2O 1.2 g/l (20℃) ● Explosive limit 1.2 - 7%(V) ● Flash point 83 ℃ ● pH value 7.4 (1.2 g/l, H_2O, 20 ℃) ● Melting point 2.5 ℃ ● Boiling point 192 - 195 ℃ ● Ignition temp. 370 ℃ DIN 51794

● IMDG UN 2253 N,N-DIMETHYLANILINE, 6.1, II ● HS Code 2921 42 00
● RTECS BX4725000 ● 제4류 2석유류

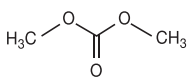
Product No.	Packing	Price(₩)
5142	1 ℓ	20,000

Dimethylbenzene → *go to Xylene*

N,N-Dimethylethanolamine → *go to 2-Dimethylaminoethanol*

Dimethyl carbonate — GR

NEW



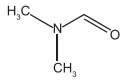
디메틸카보네이트
● CAS No. 616-38-6 ● EC No. 210-478-4
● $C_3H_6O_3$ ● FW 90.08

● Vapour pressure 53 hPa (20 ℃) ● Spec. density 1.069 g/cm³ (20 ℃) ● Explosive limit 4.22 - 12.87 Vol% ● Flash point 14 ℃ c.c. ● Solub. in H_2O 139 g/l (20℃) ● Melting point 0.5 - 4.7 ℃ ● Boiling point 90 ℃ (1016 hPa) ● Ignition temp. 458 ℃

● IMDG UN 1161 DIMETHYL CARBONATE, 3, II ● HS Code 2920 90 10
● RTECS FG0450000 ● Merck Index 10, 5914 ● 제4류 1석유류(비수용성 액체), 200ℓ

Product No.	Packing	Price(₩)
5143	1 ℓ	54,000

N,N-Dimethyl Formamide



다이메칠폼아미드, DMF,
Fomic acid dimethylamide
● CAS No. 68-12-2 ● EC No. 200-679-5
● $HCON(CH_3)_2$ ● FW 73.10

● Vapour pressure 3.77 hPa(20℃) ● Spec. density 0.94 g/cm³(20℃) ● Explosive limit 2.2-16 Vol% ● Flash point 58℃ c.c. ● Solub.in H_2O (20℃)soluble ● pH value 7 (200 g/l, H_2O, 20℃) ● Saturation conc. 12 g/cm³(20℃) ● Melting point-61℃ ●Boiling point 153℃(1013hPa) ● Ignition temp. 410℃

● IMDG UN 2265 N,N-DIMETHYLFORMAMID, 3, Ⅲ
● HS Code 2924 19 00 ● Merck Index 10, 3237
● 4류 제2석유류 (수용성 액체) 2000ℓ

N,N-Dimethyl Formamide — Extra Pure

Appearance ····· Colorless liquid, a peculiar odor
Assay (by GC) ····· Min 99.5%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Density (20℃) ····· 0.947 ~ 0.952g/ml
Water ····· Max 0.2%
Residue after evaporation ····· Max 0.02%
Acidity (as HCOOH) ····· Max 0.005%

Product No.	Packing	Price(₩)
1368	500mℓ	5,600
1369	1 ℓ	9,400
1370	18 ℓ	62,500
1961	190kg	Call

N,N-Dimethyl Formamide — GR

Appearance ····· Colorless liquid, a peculiar odor
Assay (by GC) ····· Min 99.5%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Density (20℃) ····· 0.947 ~ 0.952g/ml
Refractive index (n 20 D) ····· 1.428 ~ 1.432
Water ····· Max 0.2%
Residue after evaporation ····· Max 0.005%
Acidity (as HCOOH) ····· Max 0.003%

Product No.	Packing	Price(₩)
1367	1 ℓ	11,300
3870	2.5 ℓ	15,000
4073	4 ℓ	25,000

N,N-Dimethyl Formamide — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
270 nm ····· Max 1.00
275 nm ····· Max 0.30
295 nm ····· Max 0.10
310 nm ····· Max 0.05
340 nm ····· Max 0.01
UV Cutoff ····· Max 270nm
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.03%
Residue after evaporation ····· Max 5ppm
Titratable Acid ····· Max 0.0005mEq/g
Titratable Base ····· Max 0.003mEq/g

Product No.	Packing	Price(₩)
1371	4 ℓ	47,500

Dimethyl ketone → *go to Acetone*

N,N-Dimethyl p-Phenylenediamine dihydrochloride — GR

NEW

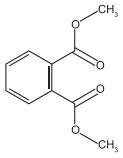
N,N-디메틸-파라-페닐렌디아민 디수화염화물
● CAS No. 536-46-9
● $C_8H_{12}N_2 \cdot 2HCl$ ● FW 209.12

Appearance ····· White crystalline powder rapidly darkens on exposure to air.
Assay ····· Min 99.0%
Solubility in water ····· To pass test

Ignition residue (as Sulfate) ····· Max 0.05%
Sulfate (SO_4) ····· Max 0.005ppm

Product No.	Packing	Price(₩)
4783	25g	36,000

Dimethyl phthalate — Extra Pure



프탈산다이메틸, DMP, Methyl phthalate
● CAS No. 131-11-3 ● EC No. 205-011-6
● $C_6H_4(COOCH_3)_2$ ● FW 7194.19

● Vapour pressure 0.008 hPa(20℃) ● Spec. density 1.19 g/cm³(20℃) ● Flash point 150℃ ●Solub.in H_2O 0.1 g/l (20℃) ● pH value 7 (20℃) ● Saturation conc. 12 g/cm³(20℃) ● Melting point 6℃ ● Boiling point 284℃(1013hPa) ● Ignition temp. 460℃(DIN51794)

● IMDG No dangerous Good
● HS Code 2917 34 90 ● Merck Index 10, 3250
● 4류 제3석유류 (비수용성 액체) 2000ℓ

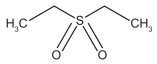
Appearance ····· Colorless, odorless, highly viscous liquid.
Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 1.187 ~ 1.195g/ml
Refractive index (n 20 D) ····· 1.513 ~ 1.519
Water ····· Max 0.3%
Ignition residue (as Sulfate) ····· Max 0.005%
Acidity ····· Max 0.01%
Lead (Pb) ····· Max 5ppm
Iron(Fe) ····· Max 5ppm

Product No.	Packing	Price(₩)
661	500g	9,400

1,3-Dimethyl propane → *go to n-Pentane*

D

Dimethyl Sulfate — Extra Pure



황산다이메틸, DMP, Methyl sulfate
● CAS No. 77-78-1 ● EC No. 201-058-1
● $(CH_3)_2SO_4$ ● FW 126.13

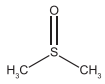
● Vapour pressure 0.35 hPa(25℃) ● Spec. density 1.33 g/cm³(20℃) ● Explosive limit 3.6-23.2 Vol% ● Flash point 83℃ c.c.(DIN51758) ● Solub.in H_2O 28 g/l(18℃)(hydrolysis) ● Melting point-31.8℃ ● Boiling point 188.5℃(1013hPa)(deomposition) ● Ignition temp. 450℃(DIN51794)

● IMDG UN 1595 DIMETHYL SULPHATE, 6(8), I
● HS Code 2920 90 10 ● Merck Index 10, 3252
● 4류 제3석유류 (비수용성 액체) 2000ℓ

Appearance ···· Colorless or slightly colored liquid whey. Not soluble in water.
Solubility in acetone ···· To pass test
Solubility in ethyl ether ···· To pass test
Density ···· 1.330 ~ 1.340
Acidity(as H_2SO_4) ···· Max 0.5%

Product No.	Packing	Price(₩)
1375	500g	10,000
1376	1kg	16,500

Dimethyl Sulfoxide



다이메틸설폭사이드, DMSO, Methyl sulfoxide
● CAS No. 67-68-5 ● EC No. 200-664-3
● C_2H_6OS ● FW 78.13

● Vapour pressure 0.6 hPa(20℃) ● Spec. density 1.10 g/cm³(20℃) ● Explosive limit 1.8-63.0 Vol% ● Flash point 87℃ c.c. ● Solub.in H_2O 25.3 g/100ml(20℃) ● Melting point18.5℃ ● Boiling point 189℃(1013hPa) ● Ignition temp. 300-302℃

● IMDG No dangerous Good
● HS Code 2930 90 85 ● Merck Index 10, 3254
● 4류 제3석유류 (수용성액체) 4000ℓ

Dimethyl Sulfoxide — ELH

Assay ···· Min 99.9%
Water ···· Max 0.05%
Density (20℃) ···· 1.099 ~ 1.103g/ml
Acidity (meq/g) ···· Max 0.001meq/g
Color ···· Max 10APHA
Residue after evaporation ···· Max 0.01%
Aluminum (Al) ···· Max 10ppb
Calcium (Ca) ···· Max 10ppb
Chromium (Cr) ···· Max 10ppb
Copper (Cu) ···· Max 10ppb
Iron (Fe) ···· Max 10ppb
Nickel (Ni) ···· Max 10ppb
Potassium (K) ···· Max 10ppb
Silicon (Si) ···· Max 10ppb
Silver (Ag) ···· Max 10ppb
Sodium (Na) ···· Max 10ppb
Zinc (Zn) ···· Max 10ppb

Product No.	Packing	Price(₩)
1965	4kg	87,500

Dimethyl Sulfoxide — Extra Pure

Appearance ···· Clear, Colorless liquid.
Assay (by GC) ···· Min 99.0%
Density (20℃) ···· 1.099 ~ 1.103g/ml
Melting point ···· Min 18.0℃
Refractive index (n 20 D) ···· 1.477 ~ 1.480
Water ···· Max 0.2%

Product No.	Packing	Price(₩)
1379	500g	9,800
1380	1kg	16,500
2758	18kg	137,500

Dimethyl Sulfoxide — GR

Product No.	Packing	Price(₩)
3055	4ℓ	70,000

Dimethyl Sulfoxide — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
263 nm ···· Max 1.00
270 nm ···· Max 0.40
290 nm ···· Max 0.18
310 nm ···· Max 0.06
330 nm ···· Max 0.02
350 nm ···· Max 0.01
UV Cutoff ···· Max 263nm
Assay (by GC) ···· Min 99.9%
Color (APHA) ···· Max 10
Water ···· Max 0.05%
Residue after Evaporation ···· Max 5ppm
Titrable acid ···· Max 0.001mEq/g

Product No.	Packing	Price(₩)
2762	4ℓ	87,500

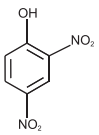
Dimethyl Sulfoxide — Bio

Ultraviolet Spectrophotometry
Maximum UV Absorbance
263 nm ···· Max 1.00
270 nm ···· Max 0.40
275 nm ···· Max 0.20
280 nm ···· Max 0.15
335 nm ···· Max 0.02
400 nm ···· Max 0.01
UV Cutoff ···· Max 263nm
Assay (by GC) ···· Min 99.7%
Color (APHA) ···· Max 10
Water ···· Max 0.025%
Residue after Evaporation ···· Max 5ppm

Product No.	Packing	Price(₩)
1381	4ℓ	118,800

2,4-Dinitrophenol — GR

NEW



2,4-디니트로페놀, 1-Hydroxy-2,4-dinitrobenzene, α-Dinitrophenol
● CAS No. 51-28-5
● $(O_2N)_2C_6H_3OH$ ● FW 184.11

● Spec. density ~1.68 g/cm³ (20℃) ● Solub.in H_2O (20℃) insoluble ● Melting point 114-115 ℃

● IMDG UN 1320 DINITROPHENOL, WETTED, 4.1 (6.1), I, Marine Pollutant:P
● HS Code 2908 99 90

Appearance ···· Yellow powder.
Assay ···· Min 99.0%
Melting point ···· 110 ~ 113℃
pH range (2.8~4.0) ···· Slightly greenish yellow to greenish yellow.
Solubility in Ethanol ···· To pass test
Water ···· About 30%

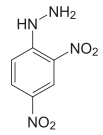
Product No.	Packing	Price(₩)
4780	25g	6,900

2,4-Dinitrophenol solution — Indicator solution

Product No.	Packing	Price(₩)
1382	500㎖	11,000

NEW

2,4-Dinitrophenyl hydrazine — GR / AR



2,4-디니트로페닐하이드라진, DNP
- CAS No. 119-26-6
- $C_6H_3(O_2N)_2NHNH_2$ • FW 198.14

- Solub.in H_2O (20℃) almost insoluble • Melting point 195-200 ℃ • Bulk density ~680 kg/m³

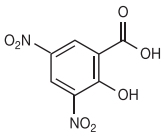
• IMDG UN 3380 DESENSITIZED EXPLOSIVE, SOLID, N.O.S. (2,4-DINITROPHENYLHYDRAZINE(STABILIZED)),4.1,I • HS Code 2928 00 90

Appearance	Orange red crystalline powder.
Assay	Min 98.0%
Solubility in Sulfuric acid	To pass test
Melting point	196 ~ 199℃

Product No.	Packing	Price(₩)
4678	25g	16,500

NEW

3,5-Dinitirososalicylic acid — Extra Pure / AR

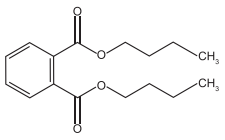


3,5-디니트로살리실산, 2-Hydroxy-3,5-dinitrobenzoic acid
- CAS No. 609-99-4 • EC No. 204-493-5
- $C_7H_4N_2O_7$ • FW 228.12

- Melting point 169 – 170 ℃

Product No.	Packing	Price(₩)
5146	25g	30,000

Dioctyl Phthalate — GR



다이옥틸프탈레이트, DOP
- CAS No. 117-81-7
- $C_6H_4(COOC_8H_{17})_2$ • FW 390.56

Appearance	Colorless, odorless, highly viscous liquid.
Assay (by GC)	Min 99.0%
Density (20℃)	0.983 ~ 0.988
Refractive index (n 20 D)	1.484 ~ 1.488
Water	Max 0.05%
Ignition residue (as Sulfate)	Max 0.005%
Acid[as $C_6H_4(COOH)_2$]	Max 0.005%
Lead (Pb)	Max 5ppm
Iron(Fe)	Max 5ppm

Product No.	Packing	Price(₩)
1383	500㎖	7,500
1384	18 ℓ	106,300

1,4-Dioxane

다이옥세인, Diethylene dioxide
- CAS No. 123-91-1 • EC No. 204-661-8
- $C_4H_8O_2$ • FW 88.11

- Vapour pressure 41 hPa(20℃) • Spec. density 1.03 g/cm³(20℃) • Explosive limit 1.7-25.2 Vol% • Flash point 11℃c.c.(DIN51755) • Solub.in H_2O (20℃)soluble • pH value 6-8 (500 g/l, H_2O, 20℃) • Saturation conc. 149 g/cm³(20℃) • Melting point 12℃ • Boiling point 101.5℃(1013hPa) • Ignition temp. 300℃

- IMDG UN 1165 DIOXANE, 3, II
- HS Code 2932 99 85 • RTECS JG8225000
- 4류 제1석유류 (수용성 액체) 400ℓ

1,4-Dioxane — Extra Pure

Appearance	Colorless, Clear liquid with a weak direction.
Assay (by GC)	Min 99.0%
Solubility in water	To pass test
Freezing point	10.0 ~ 12.0℃
Density (20℃)	1.030 ~ 1.040g/ml
Water	Max 0.5%
Residue after evaporation	Max 0.02%

Product No.	Packing	Price(₩)
1353	500㎖	10,000
1354	1 ℓ	15,000
1355	18 ℓ	150,000

1,4-Dioxane — GR

Appearance	Colorless, Clear liquid with a weak direction.
Assay (by GC)	Min 99.0%
Solubility in water	To pass test
Freezing point	10.0 ~ 12.0℃
Density (20℃)	1.030 ~ 1.035 g/ml
Water	Max 0.1%
Residue after evaporation	Max 0.01%
Acidity (as CH_3COOH)	Max 0.01%
Aldehyde	To pass test
Peroxide (as H_2O_2)	Max 0.02%

Product No.	Packing	Price(₩)
3490	4 ℓ	81,300

1,4-Dioxane — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance

215 nm	Max 1.00
225 nm	Max 0.50
250 nm	Max 0.24
270 nm	Max 0.10
300 nm	Max 0.01
UV Cutoff	Max 215nm
Assay (by GC)	Min 99.8%
Color (APHA)	Max 10
Water	Max 0.02%
Residue after evaporation	Max 5ppm
Titratable Acid	Max 0.0016mEq/g
Peroxide (as H_2O_2, at time of packaging)	Max 0.003%
Carbonyl (as HCHO)	Max 0.01%
Freezing point	Not below 11℃

Product No.	Packing	Price(₩)
1356	4 ℓ	157,500

D

D

1,3-Dioxolane — Extra Pure

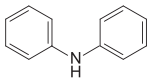
다옥솔란, Ethylene carbonate
● CAS No. 646-06-0 ● EC No. 211-463-5
● $C_3H_6O_2$ ● FW 74.06

● Vapour pressure 133 hPa(20℃) ● Spec. density 1.065 g/cm³(20℃) ● Explosive limit 2.1-20.5 Vol% ● Flash point −6℃c.c. ● Solub.in H_2O 1000 g/l (25℃) ● Melting point −95℃ ● Boiling point 74-75℃(1013hPa) ● Ignition temp. 274℃(DIN51794)

● IMDG UN 1166 DIOXOLANE, 3, II
● HS Code 2932 99 70 ● RTECS JH6760000
● 4류 제1석유류 (수용성 액체) 400ℓ

Product No.	Packing	Price(₩)
1973	1ℓ	120,000

Diphenylamine — GR / AR / ACS



디페닐아민, N-Phenylaniline
● CAS No. 122-39-4 ● EC No. 204-539-4
● $(C_6H_5)_2NH$ ● FW 169.23

● Vapour pressure ~ 0.0003 hPa (20℃) ● Spec. density 1.16 g/cm³ (20 ℃) ● Flash point ~ 153 ℃ c.c. ● Solub. in H_2O 0.05 g/l (25℃) ● Melting point 53 - 54 ℃ ● Bulk density ~ 610 kg/m³ ● Boiling point 302 ℃ (1013 hPa) ● Ignition temp. ~630 ℃ (DIN 51794)

● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(DIPHENYL AMINE), 9, III, Marine Pollutant: P ● HS Code 2921 44 00

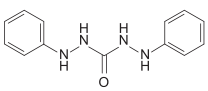
Appearance	Cream colored flakes.
Assay	Min 99.0%
Melting point	52 ~ 55.0℃
Solubility in ethanol	To pass test
Ignition residue (as Sulfate)	Max 0.05%
Sensitivity	To pass test
Nitrate (NO_3)	To pass test
Copper (Cu)	Max 0.001%
Iron (Fe)	Max 0.001%
Lead (Pb)	Max 0.001%
Aniline ($C_6H_5.NH_2$)	Max 0.05%

Product No.	Packing	Price(₩)
4781	500g	32,500

Diphenylamine solution — Indicator

Product No.	Packing	Price(₩)
1386	500㎖	14,000

1,5-Diphenylcarbazide — GR / AR / ACS



디페닐카바자이드
● CAS No. 140-22-7 ● EC No. 205-403-7
● $C_{13}H_{14}N_4O$ ● FW 242.28

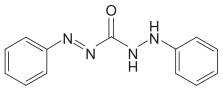
● Solub. in H_2O (20 ℃) slightly soluble ● Melting point 173 - 176 ℃ ● Bulk density ~420 kg/m³

● IMDG NO Dangerous Good ● HS Code 2928 00 90

Appearance	White ~ Orange crystalline powder.
Assay	Min 60.0%
Solubility in Acetone	To pass test
Residue on ignition (Sulfate)	Max 0.05%
Sensitiveness	To pass test

Product No.	Packing	Price(₩)
4210	25g	30,000

Diphenyl Carbazone — GR



디페닐카바존
● CAS No. 538-62-5
● $C_{13}H_{12}N_4O$ ● FW 240.26

● Solub. in H_2O (20℃) almost insoluble
● Melting point 153 - 158 ℃ (decomposition)
● Bulk density ~380 kg/m³

● IMDG NO Dangerous Good ● HS Code 2928 00 90

Appearance	A Brownish orange colored powder.
Melting point	171 ~ 175℃
Loss on drying (Silicagel)	Max 1.0%
Substance insoluble in Acetone)	Max 0.01%
Residue after ignition	Max 0.05%
Copper (Cu)	Max 0.001%
Iron (Fe)	Max 0.001%
Lead (Pb)	Max 0.001%
Nickel (Ni)	Max 0.001%

Product No.	Packing	Price(₩)
4683	25g	30,000

Diphenyl Ether → *go to Phenyl Ether*

Diphosphoric acid → *go to Pyrophosphoric acid*

α,α'-Dipyridyl → *go to 2,2'-Bipyridyl*

Dipotassium hydrogen phosphate
→ *go to Potassium Phosphate dibasic*

Disodium Hydrogen Phosphate anhydrous
→ *go to Sodium Phosphate monbasic anhydrous*

Disodium hydrogen phosphate dibasic 12-water
→ *go to Sodium Phosphate dibasic 12-water*

Disodium oxalate → *go to Sodium Oxalate*

Disodium succinate hexahydrate
→ *go to Sodium Succinate hexahydrate*

DMAC → *go to N,N-Dimethyl Acetamide*

DMF → *go to N,N-Dimethyl Formamide*

DMP → *go to Dimethyl phthalate*

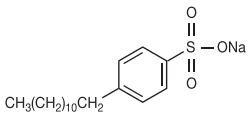
DMSO → *go to Dimethyl Sulfoxide*

Dodecanoic acid → *go to Lauric acid*

Dodecyl alcohol → *go to Lauryl Alcohol*

NEW

Dodecylbenzenesulphonic acid Sodium salt — Extra Pure



도데실벤젠설폰산 소듐

Dodecylbenzenesulfonic acid Sodium salt

- CAS No. 25155-30-0
- $C_{18}H_{29}NaO_3S$ • FW 348.48

Product No.	Packing	Price(₩)
5147	500g	9,400

DOP → *go to Dioctyl Phthalate*

Dotite-N,N Diluted with K_2SO_4 — Indicator

Product No.	Packing	Price(₩)
1396	25g	12,000

Drierite → *go to Calcium sulfate dihydrate*

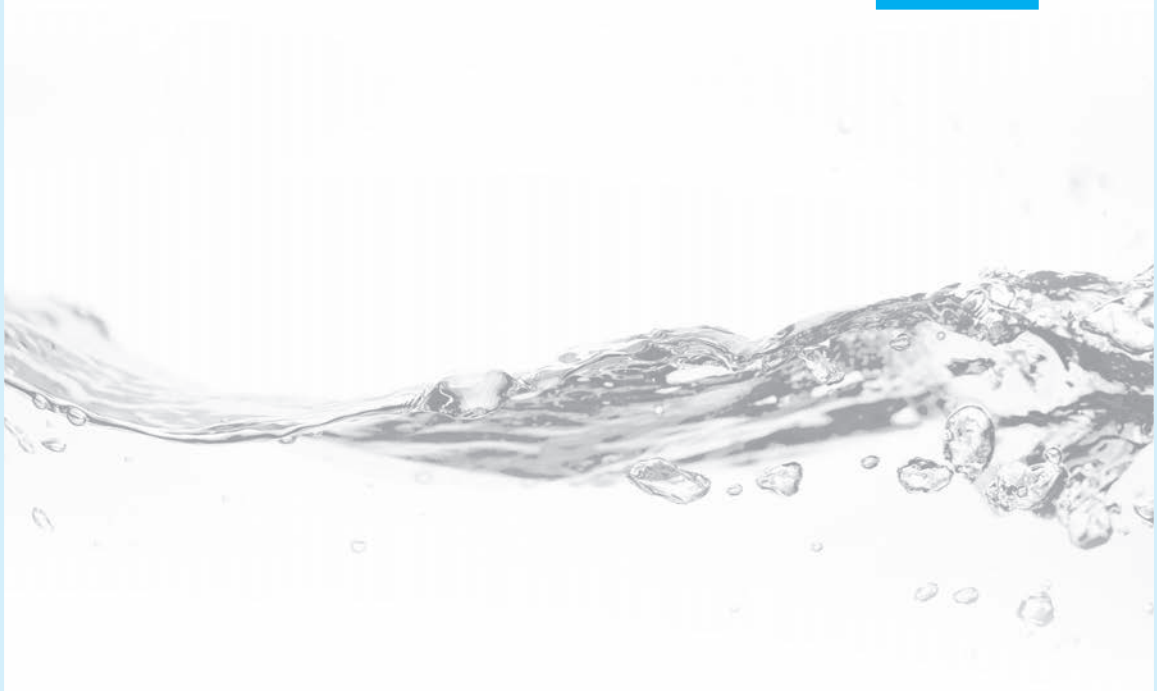
D

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

E



Alphabetical list Numbers

List of E

Product	Page
EDA	127
EDIPA	127
EDTA	127
EDTA disodium calcium salt dihydrate	127
EDTA–FeNa trihydrate	127
EDTA–2Na dihydrate	127
M/100–EDTA–2Na	127
M/40–EDTA–2Na	127
M/20–EDTA–2Na	127
M/10–EDTA–2Na	127
M/5–EDTA–2Na	127
EDTA–4Na tetrahydrate	127
EG	127
Eosin Y	127
Epichlorohydrin	127
Eriochrome Black T	127
Eriochrome Black T solution	127
1,2–Ethanediol	127
2–Ethoxyethanol	127
2–Ethoxyethyl acetate	127
Ethyl Acetate	128
Ethyl Acetoacetate	129
Ethyl Acrylate monomer	129
Ethyl Alcohol 99.9%	129
Ethyl Alcohol 70~75% 합성(Synthetic)	130
Ethyl Alcohol 95% 합성,변성(Synthetic, Denatured)	130
Ethyl Alcohol 95% 발효(Fermented)	130
Ethyl Alcohol 99.5% 변성(Denatured)	130
Ethyl Alcohol 99.5% 발효무수 (Fermented anhydrous)	130
Ethyl Alcohol 합성무수 (Synthetic anhydrous)	130
Ethyl Alcohol 95% 소독용(Disinfection)	131
Ethyl Alcohol 합성함수 (식약청고시)	131
Ethyl Alcohol 합성함수 (Synthetic)	131
Ethyl Carbitol	131
Ethyl Carbitol Acetate	131
Ethyl Cellosolve	131
Ethyl Cellulose (18–22 cps)	131
Ethyl Chloroformate	132
N–Ethyldiisopropylamine	132
Ethyl Ether	132
2–Ethyl–1–Hexanol	133
2–Ethyl Hexyl Acrylate	133
Ethyl 4–hydroxy benzoate	133
Ethyl paraben	133
Ethyl phthalate	133
Ethylene carbonate	133
Ethylene Chlorohydrin	133
Ethylene Diamine	133
Ethylene Dichloride	133

Product	Page
Ethylene Glycol	134
Ethylene Glycol dimethyl Ether	134
Ethylene Glycol monobutyl ether	134
Ethylene Glycol monoethyl ether	134
Ethylene Glycol monoethyl ether Acetate	135
Ethylene Glycol monomethyl ether	135
Ethylene Glycol monophenyl ether	135
Ethylenediaminetetraacetic acid	135
Ethylenediaminetetraacetic acid Calcium Disodium salt hydrate	136
Ethylenediaminetetraacetic acid, monosodium Iron(III) salt trihydrate	136
Ethylenediaminetetraacetic acid disodium salt dihydrate	136
Ethylenediaminetetraacetic acid tetrasodium salt tetrahydrate	136
N–Ethylethanamine	136
Ethyl Silicate28	136

EDA → *go to Ethylene Diamine*

EDIPA → *go to N-Ethyldiisopropylamine*

EDTA → *go to Ethylenediaminetetraacetic acid*

EDTA disodium calcium salt dihydrate
→ *go to Ethylenediaminetetraacetic acid Calcium Disodium*

EDTA-FeNa trihydrate
→ *go to Ethylenediaminetetraacetic acid, monosodium Iron(III) salt trihydrate*

EDTA-2Na dihydrate
→ *go to Ethylenediaminetetraacetic acid disodium salt dihydrate*

M/100-EDTA-2Na — Normal

- CAS No. 139-33-3

Product No.	Packing	Price(₩)
356	500㎖	8,800

M/40-EDTA-2Na — Normal

- CAS No. 139-33-3

Product No.	Packing	Price(₩)
353	500㎖	11,000

M/20-EDTA-2Na — Normal

- CAS No. 139-33-3

Product No.	Packing	Price(₩)
354	500㎖	8,800
5082	1 ℓ	14,000

M/10-EDTA-2Na — Normal

- CAS No. 139-33-3

Product No.	Packing	Price(₩)
355	500㎖	8,800
1990	1 ℓ	14,000

M/5-EDTA-2Na — Normal

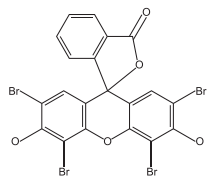
- CAS No. 139-33-3

Product No.	Packing	Price(₩)
349	500㎖	8,800

EDTA-4Na tetrahydrate
→ *go to Ethylenediaminetetraacetic acid tetrasodium salt tetrahydrate*

EG → *go to Ethylene Glycol*

Eosin Y — Indicator



에오신Y, Sodium tetrabromofluorescein, CI 45380
- CAS No. 17372-87-1 • EC No. 241-409-6
- $C_{20}H_6Br_4Na_2O_5$ • FW 691.86
- Solub.in H_2O 300 g/l(20℃) • pH value ~9.2(10 g/l, H_2O, 20℃) • Melting point 295-296℃ • Boiling point ~710 kg/m³

- IMDG No Dangerous Good • HS Code 3204 12 00

Product No.	Packing	Price(₩)
1398	25g	9,800

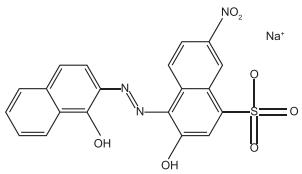
Epichlorohydrin — GR

NEW

- CAS No. 106-89-8
- C_3H_5ClO • FW 92.52

Product No.	Packing	Price(₩)
4571	1kg	15,000

Eriochrome Black T — Indicator



에리오크롬블랙, T Chrome black T, CI 14645
- CAS No. 1787-61-7
- EC No. 217-250-3
- $C_{20}H_{12}N_3NaO_7S$ • FW 461.38
- Solub.in H_2O 50 g/l(20℃) • pH value ~3.7(10 g/l, H_2O, 20℃) • Bulk density ~400-600 kg/m³

- IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (2-HYDROXY-1-(1-HYDROXY-2-NAPHTHYLAZO)-6NITRONAPHTHALENE-4-SULFONIC ACID SODIUM SALT), 9, Ⅲ • HS Code 3204 19 00

Appearance ····· Black powder or a small lump.
Solubility in water ····· Clear
Solubility in ethanol ····· Clear
Absorbance (10mg/l, pH 9.0) ····· Min 0.4
Loss on drying (at. 105℃, 4hr.) ····· Max 7.0%
Sensitivity ····· To pass test

Product No.	Packing	Price(₩)
1400	25g	7,500
1401	500g	90,000

Eriochrome Black T Solution — Indicator solution

에리오크롬블랙 솔루션

Product No.	Packing	Price(₩)
1402	500㎖	14,500

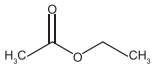
1,2-Ethanediol → *go to Ethylene Glycol*

2-Ethoxyethanol → *go to Ethylene Glycol monoethyl ether*

2-Ethoxyethyl acetate
→ *go to Ethylene Glycol monoethyl ether Acetate*

E

Ethyl Acetate



아세트산에틸, Acetic acid ethyl ester
● CAS No. 141-78-6 ● EC No. 205-500-4
● $CH_3COOC_2H_5$ ● FW 88.11

● Vapour pressure 97 hPa(20℃) ● Spec. density 0.09g/cm³(20℃) ● Explosive limit2.1-11.5Vol% ● Flash point~4℃c.c. (DIN51758) ● Solub.in H_2O 85.3 g/l(20℃) ● Saturation conc. 336 g/cm³(20℃) ● Melting point-83℃ ● Boiling point 77℃(1013hPa) ● Ignition temp. 460℃(DIN51794)

● IMDG UN 1173 ETHYL ACETATE, 3, II
● HS Code 2915 31 00 ● RTECS AH5425000 ● Merck Index 10, 3706
● 4류 제1석유류 (비수용성 액체) 200 ℓ

Ethyl Acetate Extra Pure

Appearance ····· Volatile, colourless liquid.
Assay ····· Min 99.5%
Density (20℃) ····· 0.900 ~ 0.904g/ml
Water ····· Max 0.4%
Residue after evaporation ····· Max 0.004%
Acidity (as CH_3COOH) ····· Max 0.01%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
1403	500㎖	5,000
1404	1 ℓ	8,400
1405	18 ℓ	50,000
1991	200 ℓ	Call

Ethyl Acetate GR

Appearance ····· Clear, Volatile liquid.
Assay ····· Min 99.5%
Density (20℃) ····· 0.898 ~ 0.902g/ml
Refractive index (n 20 D) ····· 1.370 ~ 1.374
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.002%
Acidity (as CH_3COOH) ····· Max 0.005%
Acetone ····· To pass test
Ethyl alcohol ····· 0.1%
Methyl Alcohol ····· 0.1%
Ethyl Acetate ····· 0.1%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
9	1 ℓ	9,400
4280	2.5 ℓ	15,000
2936	4 ℓ	22,500
2937	20 ℓ	56,400

Ethyl Acetate HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
255 nm ····· Max 1.00
260 nm ····· Max 0.15
270 nm ····· Max 0.025
UV Cutoff ····· Max 255nm
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 5ppm
Titratable Acid ····· Max 0.0009mEq/g
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
3322	1 ℓ	11,300
3083	4 ℓ	35,000

Ethyl Acetate KP

성상 ····· 무색의 맑은액, 특이한 냄새.
확인시험 ····· 시험할 때 적합 (적외부스펙트럼)
비중 d15/15 ····· 0.809 ~ 0.816
함량 (15℃비중에 의함) ····· 95.1 ~ 96.9 vol %
순도시험
용해상태 ····· 이 약 1.0ml에 물을 넣어 20ml로 하여 5분간 방치할 때 액은 맑다.
산 또는 알칼리 ····· 페놀프탈레인시액에 무색 0.01mol/L 수산화나트륨액 1.0ml에 적색
휘발성혼재물
메탄올 ····· 95.1 ~ 96.9 vol %
아세트알데히드와 아세탈 합 ····· Min 14.5 ℃
벤젠 ····· 검액 10ml에 질산은시액 5방울을 넣을 때 액은 혼탁하지 않는다.
검액의 기타혼재물 합계면적 ····· 4-메틸펜탄-2-올의 피크면적 이하
기타혼재물
240nm ····· 0.40 이하
250~260nm ····· 0.30 이하
270~340nm ····· 0.10 이하
증발잔류물(100ml, 수욕, 105℃,1시간) ····· 2.5mg 이하

Ethyl Acetate NF

Appearance ····· It is readily volatilized even at low temperatures and is flammable.
Specific gravity(25℃) ····· 0.894 ~ 0.898
Acidity ····· 0.1㎖ /2㎖
Readily carbonizable substances ····· To pass test
Limit of nonvolatile residue ····· Max 0.02%
Limit of methyl compounds ····· To pass test
Chromatographic purity ····· Min 99.5%
Assay ····· 99.0 ~ 100.5%

Product No.	Packing	Price(₩)
2833	18 ℓ	56,300

Ethyl Acetate PESTICIDE

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10ppt
Assay (by GC) ····· Min 99.8%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after Evaporation ····· Max 5ppm
Titratable acid ····· Max 0.0009mEq/g

Product No.	Packing	Price(₩)
11	4 ℓ	56,300

Ethyl Acetate Ultimate

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10ppt
FID Detectable residue (as 2-Octanol) ····· Max 5ppb
Ultraviolet Spectrophotometry
Maximum UV Absorbance
255 nm ····· Max 1.00
260 nm ····· Max 0.15
270 nm ····· Max 0.025
UV Cutoff ····· Max 255nm
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 1ppm
Fluorescence Background ····· To pass test
Titratable Acid ····· Max 0.0009mEq/g
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
2697	4 ℓ	41,300

Ethyl Acetate — Ultra Dry

Assay (by GC) ····· Min 99.8%
Color (APHA) ····· Max 10
Water ····· Max 50ppm
Residue after Evaporation ····· Max 5ppm

Product No.	Packing	Price(₩)
1406	4 ℓ	40,000

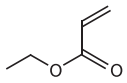
Ethyl Acetoacetate — GR

에틸아세토아세테이트, Acetoacetate Ester

● CAS No. 141-97-9 ● EC No. 205-516-1
● $CH_3COCH_2CO_2C_2H_5$ ● FW 130.14

Product No.	Packing	Price(₩)
16	500㎖	11,300

Ethyl Acrylate monomer — GR



에틸아크릴레이트, Acrylic acid ethyl ester, Ethyl 2-Propenoate

● CAS No. 140-88-5 ● EC No. 200-578-6
● $C_5H_8O_2$ ● FW 100.12

● Refractive index 1.4049 (20℃, 589nm) ● Vapour pressure 39hPa (20℃) ● Spec. density 0.92 g/cm³ (20℃) ● Explosive limit 1.8 ~ 14%(V) ● Flash point 7℃ ● Solub. in H_2O 15 g/ℓ (20℃) ● Melting point -71℃ ● Boiling point 100℃

● IMDG UN1917 ETHYL ACRYLATE, STABILIZED,3, II ● HS Code 2916 12 00
● RTECS AT0700000 ● 4류 1석유류

Appearance ····· Clear, Colorless liquid.
Assay (by GC) ····· Min 99.5%
Water ····· Max 0.05%
Density (20℃) ····· 0.921 ~ 0.926
Refractive index (n 20 D) ····· 1.404 ~ 1.408
Acidity(as acrylic acid) ····· Max 0.01%

Product No.	Packing	Price(₩)
1409	500㎖	8,800

Ethyl Alcohol 99.9%

에탄올

● CAS No. 64-17-5 ● EC No. 200-578-6
● C_2H_5OH ● FW 46.07

● Vapour pressure ~59hPa(20℃) ● Spec. density 0.805 -0.812g/ml(20℃) ● Explosive limit 3.5-15 Vol% ● Flash point 17℃ ● Solub.in H_2O (20℃) soluble ● pH value 7.0(10g/l, H_2O, 20℃) ● Melting point -117℃ ● Boiling point 78℃ ● Ignition temp. 425℃

● IMDG UN 1170 ETHANOL, 3, II
● HS Code 2207 10 00 ● 4류 알코올류 400ℓ

Ethyl Alcohol 99.9% — ELH

Assay (by GC) ····· Min 99.9%
Color ····· Max 10APHA
Alkalinity ····· Max 1ppm
Acidity ····· Max 20ppm
Water ····· Max 0.1%
Residue after evaporation ····· Max 5ppm
Aluminum (Al) ····· Max 10ppb
Arsenic (As) ····· Max 5ppb
Barium (Ba) ····· Max 5ppb
Cadmium (Cd) ····· Max 1ppb
Calcium (Ca) ····· Max 1ppb
Chromium (Cr) ····· Max 2ppb
Cobalt (Co) ····· Max 1ppb
Copper (Cu) ····· Max 1ppb
Iron (Fe) ····· Max 5ppb
Lead (Pb) ····· Max 1ppb
Lithium (Li) ····· Max 1ppb
Magnesium (Mg) ····· Max 2ppb
Manganese (Mn) ····· Max 2ppb
Nickel (Ni) ····· Max 1ppb
Potassium (K) ····· Max 5ppb
Silver (Ag) ····· Max 2ppb
Sodium (Na) ····· Max 20ppb
Strontium(Sr) ····· Max 1ppb
Zinc (Zn) ····· Max 5ppb
Particle Count (0.5 micron and above) ····· Max 100pcs/ml

Product No.	Packing	Price(₩)
80	3.8 ℓ	40,600

Ethyl Alcohol 99.9% — GR

Appearance ····· Clear, Colourless liquid, miscible with water, ether.
Assay (by GC) ····· Min 99.9%
Density (20℃) ····· 0.789 ~ 0.791g/ml
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.001%
Acidity (as CH_3COOH) ····· Max 0.002%
Alkalinity (as NH_3) ····· Max 1ppm
Aldehyde & ketone (as $CH_3CO\ CH_3$) ····· Max 0.001%
Methanol (CH_3OH) ····· Max 0.02%
2-Propanol ($CH_3CHOH\ CH_3$) ····· Max 0.01%
1-Propanol ($CH_3CH_2CH_2OH$) ····· Max 0.005%
1-Butanol [$CH_3(CH_2)_2CH_2OH$] ····· Max 0.005%
Substances reducing permanganate ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
4	1 ℓ	10,000
4150	2.5 ℓ	20,500
3463	3.8 ℓ	26,300
4151	4 ℓ	30,000
5	18 ℓ	76,300
2712	200 ℓ	Call

Ethyl Alcohol 99.9% — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
205 nm ····· Max 1.00
210 nm ····· Max 0.65
220 nm ····· Max 0.35
254 nm ····· Max 0.04
UV Cutoff ····· Max 205nm
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.1%
Residue after evaporation ····· Max 5ppm
Titratable Acid ····· Max 0.0003mEq/g
Titratable Base ····· Max 0.0002mEq/g
Acetone, isopropyl alcohol ····· To pass test
Methanol (CH_3OH) ····· Max 0.1%
Solubility in water ····· To pass test
Substances darkened by sulfuric acid ····· To pass test
Substances Reducing Permangnate ····· To pass test

Product No.	Packing	Price(₩)
76	4 ℓ	45,600

Ethyl Alcohol 99.9% — PESTICIDE

Product No.	Packing	Price(₩)
77	4 ℓ	45,600

E

Ethyl Alcohol 70~75% 합성(Synthetic) Extra Pure

Identification ····· To pass test
Appearance ····· Clear, Colourless liquid, miscible with water, ether.
Assay (by Density) ····· 70.0 ~ 75.0Vol %
Density (20℃) ····· 0.874 ~ 0.886g/ml
Residue after evaporation ····· Max 0.003%
Acidity (as CH_3COOH) ····· Max 0.002%
Alkalinity (as NH_3) ····· Max 1ppm
Heavy Metals (as Pb) ····· Max 2ppm
Aldehyde & ketone (as $CH_3CO\ CH_3$) ····· Max 0.001%
Fusel oil ····· Max 0.004%
Methanol(CH_3OH) ····· Max 0.02
Benzene or other organic impurities (C_6H_6) ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
7	18 ℓ	51,300

Ethyl Alcohol 95% 합성,변성(Synthetic, Denatured) Extra Pure

Appearance ····· Clear, Colourless loquid.
Assay (by Density) ····· Min 95.0Vol %
Density (20℃) ····· Max 0.812g/ml
Residue after evaporation ····· Max 0.003%
Acetaldehyde ····· Max 0.001%
Methanol ····· Max 0.02%
Fusel oil ····· Max 0.004%
Substances reducing permanganate ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
20	18 ℓ	46,300

Ethyl Alcohol 95% 발효(Fermented) KP

성상 ····· 무색의 맑은액, 특이한 냄새.
확인시험 ····· 시험할 때 적합 (적외부스펙트럼)
비중 d 15/15 ····· 0.809 ~ 0.816
함량 (15℃비중에의함) ····· 95.1 ~ 96.9 vol %
순도시험
- **용해상태** ····· 이 약 1.0ml에 물을 넣어 20ml로 하여 5분간 방치할 때 액은 맑다.
- **산 또는 알칼리** ····· P.P에 무색, 0.01mol/L NaOH 1.0ml 에 액은 엷은 적색

휘발성혼재물
- **메탄올** ····· 표준액(1)의 메탄올 피크면적 1/2 이하
- **아세트알데히드와 아세탈 합** ····· Max 1.0ppm
- **벤젠** ····· Max 2ppm
- **검액의 기타혼재물 합계면적** ····· 4-메틸펜탄-2-올의 피크면적 이하

기타혼재물
- **240 nm** ····· Max 0.40
- **250-260 nm** ····· Max 0.30
- **270-340 nm** ····· Max 0.10

증발잔류물 (100ml, 수욕, 105℃,1시간) ····· Max 2.5mg/100ml

Product No.	Packing	Price(₩)
22	18 ℓ	56,300
19	200 ℓ	Call

Ethyl Alcohol 99.5% 변성(Denatured)

Appearance ····· Clear, Colourless loquid.
Assay (by GC) ····· Min 99.5%
Density (20℃) ····· 0.789 ~ 0.791 g/ml
Residue after evaporation ····· Max 0.003%
Acetaldehyde ····· Max 0.001%
Methanol ····· Max 0.02%
Fusel oil ····· Max 0.004%
Substances reducing permanganate ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Ethyl Alcohol 99.5% 변성(Denatured) Extra Pure

Product No.	Packing	Price(₩)
3951	18 ℓ	56,300
3950	200 ℓ	562,500

Ethyl Alcohol 99.5% 변성(Denatured) GR

Product No.	Packing	Price(₩)
3979	2.5 ℓ	12,500
3980	4 ℓ	19,000

Ethyl Alcohol 99.5% 발효무수(Fermented, Anhydrous) KP

성상 ····· 무색의 맑은액.
비점 ····· 78 ~ 79℃
확인시험 ····· 적외부스펙트럼측정법의 액막법
비중 d 15/15 ····· 0.794 ~ 0.797
함량(15℃ 비중에 의함) ····· Min 99.5 vol %
순도시험
- **용해상태** ····· 이 약 1.0ml에 물을 넣어 20ml로 하여 5분간 방치할 때 액은 맑다.
- **산 또는 알칼리** ····· 페놀프탈레인시액에 무색
  0.01mol/L 수산화나트륨액 1.0ml에 엷은적색

휘발성혼재물
- **메탄올** ····· 표준액 A의 피크면적 1/20이하
- **아세트알데히드와 아세탈 합** ····· Max 1.0ppm
- **벤젠** ····· Max 2ppm
- **검액의 기타혼재물 합계면적** ····· 4-메틸펜탄-2-올의 피크면적 이하

기타혼재물 ····· 시험할 때 적합하다
- **240 nm** ····· Max 0.40
- **250-260 nm** ····· Max 0.30
- **270-340 nm** ····· Max 0.10

증발잔류물 (100ml, 수욕, 105℃,1시간) ····· Max 2.5mg/100ml

Product No.	Packing	Price(₩)
69	18 ℓ	65,000
2971	200 ℓ	Call

Ethyl Alcohol 합성무수(Synthetic, Anhydrous) Extra Pure

Appearance ····· Clear, Colourless liquid, miscible with water, ether.
Assay (Density) ····· Min 99.0%
Density (20℃) ····· Max. 0.794g/ml
Water ····· Max 0.4%
Residue after evaporation ····· Max 0.003%
Acidity (as CH_3COOH) ····· Max 0.002%
Alkalinity (as NH_3) ····· Max 1ppm
Aldehyde & ketone (as CH_3COCH_3) ····· Max 0.001%
Methanol(CH_3OH) ····· Max 0.02%
2-Propanol ($CH_3CHOHCH_3$) ····· Max 0.01%
1-Propanol ($CH_3CH_2CH_2OH$) ····· Max 0.005%
1-Butanol [$CH_3(CH_2)_2CH_2OH$] ····· Max 0.005%
Substances reducing permanganate ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
71	1 ℓ	9,400
72	18 ℓ	70,000
73	200 ℓ	Call

Ethyl Alcohol 합성무수(Synthetic, Anhydrous) USP

Appearance ····· Colorless & clear liquid.
Clarity of solution ····· Compare the turbidity of the test solution and the standard suspensions.
Color of solution ····· Comparison the color of test solution and standard solution.
Specific gravity(15.56℃) ····· Max 0.7962g/ml
Acidity or alkalinity ····· To pass test
Ultraviolet absorption
- 240 nm ····· Max 0.40
- 250-260 nm ····· Max 0.30
- 270-340 nm ····· Max 0.10

Volatile impurities
- Methanol ····· Not more than half the peak area of standard solution A
- Acetaldehyde+acetal ····· Max 10ppm
- Benzene ····· Max 2ppm
- Total of all other impurities ····· Not more than test solution B

Limit of nonvolatile residue ····· Max 2.5mg
Assay (by Specific gravity) ····· Min 99.5Vol%

Product No.	Packing	Price(₩)
1733	1 ℓ	7,300
75	18 ℓ	67,500
21	200 ℓ	Call

Ethyl Alcohol 소독용(Disinfection) 의약외품

성상 ····· 이 약은 무색의 맑은 액으로 물과 섞인다.
확인시험 1 ····· 이 약1ml에 요오드시액 2ml 및 수산화나트륨시액 1ml를 넣어 흔들어 섞을때 엷은 황색 침전이 생긴다.
확인시험 2 ····· 이 약1ml에 아세트산무수물 1ml 및 황산 3 방울을 넣어 가열할 때 에틸아세테이트 냄새가 난다.
비중 d 15/15 ····· 0.860 ~ 0.873
용해상태 ····· 이약 1.0ml에 물을 넣어 20ml로 하여 5분간 방치할때 액은 맑다.
산 또는 알칼리 ····· P.P 에 무색, 0.01mol NaOH 1.0ml 에 액은 적색을 나타낸다.
휘발성혼재물 ····· 시험할 때 적합하다
기타혼재물 ····· 240nm에서 흡광도 0.40이하
250nm~~260nm에서 흡광도 0.30이하
270nm~340nm에서 흡광도 0.10이하
증발잔류물 ····· 2.5mg/100ml
함량 (비중에 의한다) ····· 76.9 ~ 81.4Vol %

Product No.	Packing	Price(₩)
8	18 ℓ	47,500

Ethyl Alcohol 합성함수 KP

성상 ····· 무색의 맑은액, 특이한 냄새.
확인시험 1 ····· 요오드시액 및 수산화나트륨시액에 황색침전
확인시험 2 ····· 빙초산,황산을 가해 가열시 초산에칠냄새
비중 d 15/15 ····· 0.814 ~ 0.816
함량 (15℃, 비중에의함) ····· 95.0 ~ 95.5 Vol %
순도시험
용해상태 ····· 이 약 30ml에 물 30ml를 섞어 10℃로 30분간 방치할 때 액은 맑다
산 또는 알칼리 ····· 페놀프탈레인시액에 무색 0.02mol/L수산화나트륨시액 0.9mL이하에서 홍색
염화물 ····· 묽은 질산 및 질산은 시액에 5분 방치 시 액 변화하지 않음
중금속 ····· Max 1.2ppm
퓨젤유 및 유사불순물 ····· 상온에 방치하여 휘산 시 이 약 이외의 냄새가 나지 않으며황산에 홍색을 나타내지 않음
알데히드 또는 기타 환원성 물질 ····· 0.02mol/L 과망간산칼륨액 0.30mL에 적색유지 수산화나트륨시액에 황색을 나타내지 않음
증발잔류물 ····· Max 1.0mg/40mlmg/ml
메탄올 ····· 60℃수욕에서 10분간 가열할 때 남색을 나타내지 않음
에탄올 중 휘발성혼재물 ····· 끓는 수욕에서 가열하였을 때 3분 이내에 침전이 생기지 않음

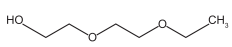
Product No.	Packing	Price(₩)
1501	18 ℓ	56,300
1502	200 ℓ	Call

Ethyl Alcohol 합성함수(Synthetic) Extra Pure

Appearance ····· Clear, Colourless liquid, miscible with water, ether.
Assay (by Density) ····· Min. 94.0Vol%
Density (20℃) ····· Max. 0.815g/ml
Residue after evaporation ····· Max 0.003%
Acidity (as CH_3COOH) ····· Max 0.002%
Alkalinity (as NH_3) ····· Max 1ppm
Heavy Metals (as Pb) ····· Max 2ppm
Aldehyde & ketone (as $CH_3CO\ CH_3$) ····· Max 0.001%
Fusel oil (as $C_5H_{12}O$) ····· Max 0.004%
Methanol(as CH_3OH) ····· Max 0.02%
Benzene or other organic impurities ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
1	500㎖	5,600
2	1 ℓ	8,100
3	18 ℓ	58,800
2714	200 ℓ	Call

Ethyl Carbitol Extra Pure



에틸캐비톨, Diethylene glycol monoethylether
● CAS No. 111-90-0
● $C_2H_5OCH_2CH_2OCH_2CH_2OH$ ● FW 134.18

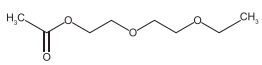
● Vapour pressure 0.13 hPa(20℃) ● Spec. density0.99g/cm³(20℃) ● Explosive limit1.8-12.2 Vol% ● Flash point94℃ ● Solub.in H_2O (20℃) soluble ● Melting point -78℃ ● Boiling point 202℃(1013hPa) ● Ignition temp. 204℃

● IMDG No dangerous Good
● HS Code 2909 44 00 ● Merck Index 10, 1782
● 제4류 제3석유류 (수용성 액체) 4000ℓ

Appearance ····· Sweet smell, hygroscopic liquid.
Assay ····· Min 98.0%
Density (20℃) ····· 0.990 ~ 0.995g/ml

Product No.	Packing	Price(₩)
17	1 ℓ	16,300
18	18 ℓ	112,500

Ethyl Carbitol Acetate Extra Pure



에틸캐비톨아세테이트
Dietylene glycol monoethyl ether acetate
● CAS No. 112-15-2
● $CH_3COOCH_2CH_2OCH_2CH_2OCH_2CH_3$
● FW 176.21

● Vapour pressure 0.3 hPa(20℃) ● Spec. density 1.01g/cm³(20℃) ● Explosive limit 1.5 Vol% ● Flash point 100℃ ● Solub.in H_2O (20℃) soluble ● pH value (20℃)neutral ● Melting point -25℃ ● Boiling point 217-218℃ ● Ignition temp. 310℃

● IMDG No dangerous Good
● HS Code 2915 39 80 ● 4류 제3석유류 (수용성 액체) 4000ℓ

Appearance ····· Colorless liquid.
Assay (by GC) ····· Min 95.0%
Solubility in water ····· To pass test
Density (20℃) ····· 1.010 ~ 1.020g/ml
Refractive index (n 20 D) ····· 1.421 ~ 1.424
Water ····· Max 0.1%
Acidity (as CH_3CH_2COOH) ····· Max 0.02%

Product No.	Packing	Price(₩)
288	500㎖	9,000

Ethyl Cellosolve → *go to Ethylene Glycol monoethyl ether*

Ethyl Cellulose (18-22 cps) Extra Pure NEW

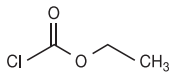
에틸 셀루로스
● CAS No. 9004-57-3

Product No.	Packing	Price(₩)
5148	500g	127,500

E

NEW

Ethyl chloroformate — Extra Pure



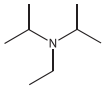
에틸클로로포르메이트, Ethyl chlorocarbonate
● CAS No. 541-41-3 ● EC No. 208-778-5
● $C_3H_5ClO_2$ ● FW 108.53

● Vapour pressure 54 hPa (20 ℃) ● Spec. density 1.135g/cm³ (20 ℃) ● Explosive limit 3.7 – 12.6 Vol% ● Flash point 10 ℃ ● Solub. in H_2O (20℃) (decomposition) ● pH value (20 ℃) acid ● Melting point −81 ℃ ● Boiling point 95 ℃ (1013 hPa) ● Ignition temp. 450 ℃

● IMDG UN 1182 ETHYL CHLOROFORMATE, 6.1 (3, 8), I ● HS Code 2915 90 70
● RTECS LQ6125000 ● Merck Index 10, 3731 ● 제4류 1석유류

Product No.	Packing	Price(₩)
5149	500㎖	22,500

N-Ethyldiisopropylamine — Extra Pure



N,N-Diisopropylethylamine, EDIPA
● CAS 7087-68-5 ● EC No 230-392-0
● $[(CH_3)_2CH]_2NCH_2CH_3$, $C_8H_{19}N$
● FW 129.24

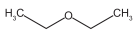
● Refractive index 1.412 (25℃) ● Vapour pressure 16 hPa (20℃) ● Spec. density 0.76g/cm³(20℃) ● Explosive limit 0.7-6.3 Vol% ● Flash point 6℃ ● Solub.in H_2O 3.9g/l (20℃) ● pH value 12.3 (emulsion) ● Melting point −46℃ ● Boiling point 127℃ ● Ignition temp. 240℃

● UN2733 AMINES, FLAMMABLE, CORROSIVE, N.O.S. or POLYAMINES, FLAMMABLE, CORROSIVE, N.O.S. , 3, II
● HS Code 2921 19 99 ● 4류 제1석유류 (비수용성 액체) 200ℓ

Appearance ····· Colorless-slightly yellow, Clear liquid.
Assay ····· Min 99.5%
Color (APHA) ····· Max 30
Water ····· Max 0.2%
Solubility in water ····· To pass test
Specific gravity (20℃) ····· 0.750 ~ 0.758
Refractive index (20℃) ····· 1.411 ~ 1.416

Product No.	Packing	Price(₩)
3697	1ℓ	105,000

Ethyl Ether



에틸에터, Diethyl Ether
● CAS No. 60-29-7
● $C_2H_5OC_2H_5$ ● FW 74.12

● Vapour pressure 587 hPa(20℃) ● Spec. density 0.71g/cm³ ● Explosive limit 1.6-37 Vol% ● Flash point −40℃(DIN51755) ● Solub.in H_2O 69g/l(20℃) ● Saturation conc. 1776g/m³ ● Melting point −116.3℃ ● Boiling point 34.6℃(1013hPa) ● Ignition temp. 180℃ (DIN51794)

● IMDG UN 1155 DIETHYL ETHER, 3, I
● HS Code 2909 11 00 ● RTECS KI5775000

Ethyl Ether — Extra Pure

Appearance ····· Clear, Volatile liquid.
Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 0.712 ~ 0.714g/ml
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.002%
Acidity (as CH_3COOH) ····· Max 0.003%
Peroxide (as H_2O_2) ····· To pass test

Product No.	Packing	Price(₩)
545	500㎖	7,500
548	1ℓ	11,300
550	18ℓ	93,800

Ethyl Ether — GR

Appearance ····· Clear, Volatile liquid
Assay (by GC) ····· Min 99.5%
Density (20℃) ····· 0.712 ~ 0.714g/ml
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.001%
Acidity (as CH_3COOH) ····· Max 0.001%
Ethyl alcohol(C_2H_5OH) ····· Max 0.05%
Aldehyde & ketone (as CH_3COCH_3) ····· To pass test
Perdxide (as H_2O_2) ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
543	1ℓ	13,000
2943	4ℓ	37,500

Ethyl Ether — GR

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
- 218 nm ····· Max 1.00
- 254 nm ····· Max 0.07
- 280 nm ····· Max 0.02
- 350 nm ····· Max 0.01
- UV cutoff ····· Max 218nm

Assay (by GC Excluding Preservative) ····· Min 99.8%
Color (APHA) ····· Max 10
Water ····· Max 0.03%
Residue after evaporation ····· Max 5ppm
Titratable Acid ····· Max 0.0002mEq/g
Preservative (C_2H_5OH) ····· 1.5~2.5%
Peroxide(as H_2O_2, at time of packaging) ····· Max 1ppm
Carbonyl Compounds (as HCHO) ····· Max 0.001%

Product No.	Packing	Price(₩)
3874	2.5ℓ	18,800
558	4ℓ	62,500

Ethyl Ether — Ultimate

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10ppt
FID Detectable residue (as 2-Octanol) ····· Max 5ppb
Ultraviolet Spectrophotometry
Maximum UV Absorbance
- 218 nm ····· Max 1.00
- 254 nm ····· Max 0.07
- 280 nm ····· Max 0.02
- 350 nm ····· Max 0.01

UV cutoff ····· Max 218nm
Assay (by GC Excluding Preservative) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.01%
Residue after evaporation ····· Max 1ppm
Fluorescence Background ····· To pass test
Titratable Acid ····· Max 0.0002mEq/g
Preservative (C_2H_5OH) ····· 1.5~2.5%
Peroxide(as H_2O_2, at time of packaging) ····· Max 5ppm
Carbonyl Compounds (as HCHO) ····· Max 0.001%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
2691	4ℓ	75,000

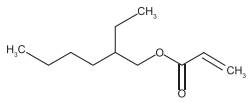
Ethyl Ether — PESTICIDE

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10 ppt
Assay (by GC, Excluding Preservation) ····· Min 99.5%
Color (APHA) ····· Max 10
Water ····· Max 0.08%
Residue after Evaporation ····· Max 3 ppm
Perdxide (as H_2O_2 at time of packaging) ····· 5 ppm
Titratable Acid ····· Max 0.0002mEq/g

Product No.	Packing	Price(₩)
567	4 ℓ	50,000

2-Ethyl-1-Hexanol → *go to Iso-Octanol*

2-Ethyl Hexyl Acrylate — GR



아크릴산2-에텔헥실
Acrylic acid 2-ethylhexyl ester
● CAS No. 103-11-7 ● EC No. 203-080-7
● $CH_3(CH_2)_3CH(C_2H_5)CH_2OCOCH=CH_2$ ● FW 184.28

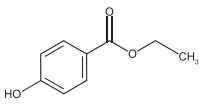
● Vapour pressure 0.12 hPa(20℃) ● Spec. density 0.887g/cm³(20℃) ● Explosive limit 0.9-6.0 Vol% ● Flash point 86℃c.c. ● Solub.in H_2O 0.1g/l (25℃) ● Melting point -90℃ ● Boiling point ~229℃(1013hPa) ● Ignition temp. 230℃

● IMDG No dangerous Good
● HS Code 2916 12 90 ● 4류 제3석유류 (수용성 액체) 2000ℓ

Product No.	Packing	Price(₩)
584	500㎖	10,800

Ethyl 4-hydroxy benzoate → *go to Ethyl paraben*

Ethyl paraben — Extra Pure



에틸파라벤, Ethyl 4-hydroxy benzoate
● CAS No. 120-47-8 ● EC No. 204-399-4
● $HOC_6H_4COOC_2H_5$ ● FW 166.18

● Vapour pressure 0.23 hPa(25℃)(calculated) ● Solub.in H_2O 1.7g/l(25℃) ● pH value ~4.5-5.5 (20℃)(saturated solution) ● Melting point 116-118℃ ● Boiling point 297℃(1013hPa)(decomposition) ● Ignition temp. 495℃

● IMDG No dangerous Good
● HS Code 2918 29 30

Appearance ····· Colorless crystals or crystalline powder.
Assay (after dried) ····· Max 99.0%
Melting point ····· 116.0 ~ 118.0℃
Loss on drying ····· Max 0.5%
Ignition residue (as Sulfate) ····· Max 0.1%
Chloride (Cl) ····· Max 0.035%
Sulfate (SO_4) ····· Max 0.024%
Heavy metals (as Pb) ····· Max 0.002%
Salicylic acid ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
628	25g	5,300
630	500g	20,000

Ethyl phthalate → *go to Diethyl Phthalate*

Ethylene carbonate → *go to 1,3-Dioxolane*

Ethylene Chlorohydrin — Extra Pure

에틸렌글로로하이드린, 2-Chloroethanol
● CAS No. 107-07-3 ● EC No. 203-459-7
● $ClCH_2CH_2OH$ ● FW 80.52

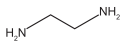
● Vapour pressure 6.6 hPa(20℃) ● Spec. density 1.20g/cm³(20℃) ● Explosive limit 5-16Vol% ● Flash point 55℃(DIN51755) ● Solub.in H_2O (20℃) freely soluble ● pH value 6-7(500g/l, H_2O, 20℃) ● Melting point -63℃ ● Boiling point 129℃(1013hPa) ● Kin. viscosity 3.43(23℃) ● Ignition temp. 425℃(DIN51794)

● IMDG UN 1135 ETHYLENE CHLOROHYDRIN, 6.1(3), I
● HS Code 2905 59 10 ● RTECS KK0875000 ● Merck Index 10, 3739
● 4류 제2석유류 (수용성 액체)

Appearance ····· Colorless liquid.
Assay (G.C) ····· Min 98.0%
Density(20℃) ····· 1.200~1.210g/ml
Refractive index (n 20 D) ····· 1.439~1.445
Solubility in Ethanol ····· To pass test

Product No.	Packing	Price(₩)
306	500㎖	9,800

Ethylene Diamine — Extra Pure



에틸렌다이아민, 1,2-Diaminoethane, EDA
● CAS No. 107-15-3 ● EC No. 203-468-6
● $H_2NCH_2CH_2NH_2$ ● FW 60.10

● Vapour pressure 12hPa(20℃) ● Spec. density 0.90g/cm³(20℃) ● Explosive limit 2.5-16.3Vol% ● Flash point ~36℃c.c. ● Solub.in H_2O (20℃) soluble ● pH value ~12(250g/l, H_2O 25℃) ● Melting point -11℃ ● Boiling point 116℃(1013hPa) ● Ignition temp. 400℃(DIN51794)

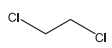
● IMDG UN 1604 ETHYLENEDIAMINE, 8 (3), II
● HS Code 2921 21 00 ● RTECS KH8575000 ● Merck Index 10, 3741
● 4류 제2석유류 (수용성 액체) 2000ℓ

Appearance ····· Yellow or Clear
Assay ····· Min 99.0%
Density (20℃) ····· 0.897 ~ 0.910g/ml

Product No.	Packing	Price(₩)
441	500㎖	11,000
1999	1 ℓ	18,000
445	18 ℓ	Call

E

Ethylene Dichloride



이염화에틸렌 1,2-Dichloroethane

● CAS No. 107-06-2 ● EC No. 203-458-1
● CH_2ClCH_2Cl ● FW 98.97

● Vapour pressure 87hPa(20℃) ● Spec. density 1.25g/cm³(20℃) ● Explosive limit 6-11.4Vol% ● Flash point 13℃c.c. ● Solub.in H_2O 8.7g/l(20℃) soluble ● Saturation conc. 350g/m³ (20℃) ● Melting point -35.5℃ ● Boiling point 83.5-84.1℃(1013hPa) ● Ignition temp. 412.6-440℃

● IMDG UN 1184 ETHYLENE DICHLORIDE, 3(6.1),II
● HS Code 2903 15 00
● RTECS KI0525000 ● 4류 제1석유류 (비수용성 액체) 200ℓ

Ethylene Dichloride — Extra Pure

Appearance	Clear, Colourless liquid, Characteristic odor.
Assay (by GC)	Min 99.5%
Density (20℃)	1.251 ~ 1.261g/ml
Water	Max 0.2%
Residue after evaporation	Max 0.01%
Acidity (as HCl)	10 ppm
Chloride (Cl)	Max 0.002%
Iodine value	To pass test
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
2002	500g	4,900
412	1kg	8,800
479	20kg	60,000

Ethylene Dichloride — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance

226 nm	Max 1.0
230 nm	Max 0.5
235 nm	Max 0.2
240 nm	Max 0.1
245 nm	Max 0.05
250 nm	Max 0.02
255 nm	Max 0.01
400 nm	Max 0.01
UV Cutoff	Max 226nm
Assay (by GC)	Min 99.5%
Color (APHA)	Max 10
Water	Max 0.02%
Residue after evaporation	Max 5ppm
Titratable Acid	Max 0.0003mEq/g

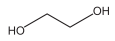
Product No.	Packing	Price(₩)
425	4ℓ	78,800

Ethylene Dichloride — ACS

Appearance	Clear, Colorless liquid.
Assay (by GC)	Min 99.0%
Color (APHA)	Max 10
Residue after evaporation	Max 0.002%
Titrable acid	Max 0.0003 meq/g
Water	Max 0.03%

Product No.	Packing	Price(₩)
2004	4ℓ	50,000

Ethylene Glycol



에틸렌글리콜, 1,2-Ethanediol

● CAS No. 107-21-1 ● EC No. 203-473-3
● $HOCH_2CH_2OH$ ● FW 62.07

● Vapour pressure 0.053hPa(20℃) ● Spec. density 1.11g/cm³(20℃) ● Solub.in H_2O 1000 g/l(20℃) ● pH value6-7.5(100mg/l, H_2O, 20℃) ● Melting point13℃ ● Boiling point 197.6℃(1013hPa) ● Ignition temp. 410℃(DIN51794)

● IMDG No dangerous Good
● HS Code 2905 31 00 ● 4류 제3석유류 (수용성 액체) 4000ℓ

Ethylene Glycol — Extra Pure

Appearance	Colorless, viscosity, hygroscopic liquid.
Assay	Min 99.5%
Solubility in water	To pass test
Density (20℃)	1.100 ~ 1.117g/ml
Water	Max 0.5%
Ignition residue (as Sulfate)	Max 0.02%
Acidity (as CH_3COOH)	Max 0.01%
Chloride (Cl)	Max 5ppm
Iron (Fe)	Max 0.001%
Substances darkened by sulfuric acid	To pass test
Sulfate (SO_4)	Max 0.002%

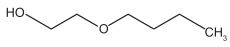
Product No.	Packing	Price(₩)
2005	500g	5,000
454	1kg	8,500
460	20kg	71,300

Ethylene Glycol — GR

Product No.	Packing	Price(₩)
3976	2.5ℓ	17,300

Ethylene Glycol dimethyl Ether → *go to 1,2-Dimethoxyethane*

Ethylene Glycol monobutyl ether — Extra Pure



뷰틸셀로솔브, 2-Butoxyethanol, Butyl Cellosolve

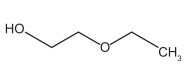
● CAS No. 111-76-2 ● EC No. 203-905-0
● $C_6H_{14}O_2$ ● FW 118.18

● Vapour pressure 0.8hPa(20℃) ● Spec. density 0.90g/cm³(20℃) ● Explosive limit 1.1-10.6Vol% ● Flash point 63-64℃c.c. ● Solub.in H_2O (20℃) soluble ● pH value 7(20℃) ● Saturation conc. 5g/cm³(20℃) ● Melting point <-70℃ ● Boiling point 168-170℃ ● Ignition temp. 230℃(DIN51794)

● IMDG UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (ETHYLENE GLYCOL MONO-BUTYL ETHER), 6.1, Ⅲ
● HS Code 2909 43 00 ● RTECS KJ8575000 ● Merck Index 10, 1532

Product No.	Packing	Price(₩)
1062	500mℓ	7,000
1063	1ℓ	10,000
1064	18ℓ	105,000
1847	180kg	Call

Ethylene Glycol monoethyl ether — Extra Pure



에틸셀로솔브, 2-ethoxyethanol, Ethyl Cellosolve

● CAS No. 110-80-5 ● EC No. 203-804-1
● $C_2H_5OCH_2CH_2OH$ ● FW 90.12

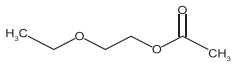
● Vapour pressure ~5hPa(20℃) ● Spec. density 0.93g/cm³(20℃) ● Explosive limit 1.8-15.7Vol% ● Flash point ~40℃c.c. ● Solub.in H_2O (20℃) freely soluble ● pH value (20℃)netural ● Saturation conc. 18g/cm³(20℃) ● Melting point -100℃ ● Boiling point 135℃ ● Ignition temp. 235℃

● IMDG UN 1171 ETHYLENEGLYCOL MONOETHYLETHER, 3, III
● HS Code 2909 44 00 ● Merck Index 10, 3700
● 4류 제2석유류 (비수용성 액체) 2000ℓ

Appearance ····· Colorless, soft smell, Medium volatile liquid.
Density (20℃) ····· 0.929 ~ 0.931g/ml
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.005%
Acidity (as CH_3COOH) ····· Max 0.005%
Assay(by GC) ····· Min 99.0%

Product No.	Packing	Price(₩)
291	1ℓ	11,300
293	18ℓ	112,500
2011	200kg	Call

Ethylene Glycol monoethyl ether Acetate — Extra Pure



에틸셀로솔브아세테이트, 2-Ethoxyethyl Acetate
● CAS No. 111-15-9 ● CAS No. 203-839-2
● $CH_3CO_2CH_2CH_2OC_2H_5$ ● FW 132.16

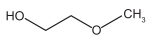
● Vapour pressure 2.67hPa(20℃)(calcurated) ● Spec. density 0.97g/cm³(20℃) ● Explosive limit 1.3-7.2Vol% ● Flash point 52℃c.c. ● Solub.in H_2O 247g/l(20℃) ● pH value 4-5(H_2O, 20℃)(saturated solution) ● Saturation conc. 14g/cm³(20℃) ● Melting point -62℃ ● Boiling point 156℃(1013hPa) ● Ignition temp. 379℃

● IMDG UN 1172 ETHYLENEGLYCOL MONOETHYL ETHER ACETATE, 3, III
● HS Code 2915 39 80 ● Merck Index 10, 3701
● 4류 제2석유류 (비수용성 액체) 1000ℓ

Appearance ····· Colorless, soft, fresh scent liquid.
Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 0.973 ~ 0.978g/ml
Refractive index (n 20 D) ····· 1.403 ~ 1.407
Water ····· Max 0.2%
Acidity (as CH_3COOH) ····· Max 0.1%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
299	500㎖	7,500
303	18ℓ	93,800
2013	200kg	Call

Ethylene Glycol monomethyl ether — Extra Pure



메틸셀로솔브, 2-Methoxyethanol, methyl Cellosolve
● CAS No. 109-86-4 ● EC No. 203-713-7
● $CH_3OCH_2CH_2OH$ ● FW 76.10

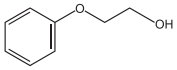
● Vapour pressure 10hPa(20℃) ● Spec. density 0.964g/cm³(20℃) ● Explosive limit 2.5-20Vol% ● Flash point 37℃(DIN51755) ● Solub. in H_2O (20℃) Soluble ● pH value (20℃)(netural) ● Saturation conc. 33g/cm³(20℃) ● Melting point -85℃ ● Boiling point 125℃ ● Kin. viscosity 1.6 (20℃) ● Ignition temp. 325℃(DIN51794)

● IMDG UN 1188 ETHYLENEGLYCOL MONOETHYL ETHER, 3, III
● HS Code 2909 44 00 ● 4류 제2석유류 (수용성 액체) 2000ℓ

Appearance ····· Colourless liquid.
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Density (20℃) ····· 0.964 ~ 0.969g/ml
Refractive index (n 20 D) ····· 1.401 ~ 1.404
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.01%
Acidity (as CH_3COOH) ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
492	1ℓ	11,000
494	18ℓ	112,500

Ethylene Glycol monophenyl ether — Extra Pure



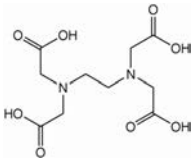
페녹시에탄올, 2-Phenoxy ethanol
● CAS No. 122-99-6 ● EC No. 204-589-7
● $C_6H_5OCH_2CH_2OH$ ● FW 138.17

● Vapour pressure 0.04hPa(20℃) ● Spec. density 1.11g/cm³(20℃) ● Explosive limit 1.4-9.0Vol% ● Flash point ~121℃(DIN51758) ● Solub.in H_2O 24g/l (20℃) ● pH value ~7(10g/l, H_2O 23℃) ● Melting point -13℃ ● Boiling point 244-250℃(1013hPa) ● Ignition temp. 535℃(DIN51794)

● IMDG No dangerous Good
● HS Code 2909 49 90 ● Merck Index 10, 7135
● 4류 제3석유류 (비수용성 액체) 2000ℓ

Product No.	Packing	Price(₩)
536	500g	16,500

Ethylenediaminetetraacetic acid



에틸렌디아아민테트라아세트산, EDTA
● CAS No. 60-00-4 ● EC No. 200-449-4
● $C_{10}H_{16}N_2O_8$ ● FW 292.25

● Vapour pressure 〈 0.013 hPa (20℃)) ● Spec. density 0.86 g/cm3 (20℃) ● Solub.in H_2O 0.5g/l(20℃) ● pH value 2.5 (10g/l, H2O, 23℃) (slurry) ● Melting point 220℃ (decomposition) ● Bulk density ~600 kg/m³ ● Ignition temp. 〉200℃(DIN51794)

● IMDG No Dangerous Good
● HS Code 2922 49 95 ● RTECS AH4025000

Ethylenediaminetetraacetic acid — Extra Pure

Appearance ····· White crystal or crystalline powder.
Assay (after dried) ····· Min 99.0%
Solubility in sodium carbonate ····· To pass test
Loss on drying ····· Max 0.2%
Ignition residue (as Sulfate) ····· Max 0.2%
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
392	500g	10,500

Ethylenediaminetetraacetic acid — GR

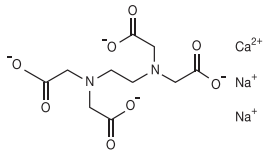
Appearance (APHA) ····· White crystal or crystalline powder.
Assay (after dried) ····· Min 99.5%
Solubility in sodium carbonate ····· To pass test
Loss on drying ····· Max 0.2%
Ignition residue (as Sulfate) ····· Max 0.2%
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
389	500g	19,500

E

NEW

Ethylenediaminetetraacetic acid Calcium Disodium salt hydrate Extra Pure



에틸렌디아민테트라아세트산 칼슘 디소듐염
EDTA disodium calcium salt dihydrate
- CAS No. 62-33-9
- $C_{10}H_{12}CaN_2Na_2O_8 \cdot aq$ • FW 374.28 + aq

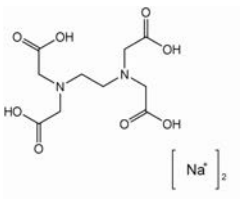
Product No.	Packing	Price(₩)
5150	25g	12,500

Ethylenediaminetetraacetic acid, monosodium Iron(III) salt trihydrate Extra Pure

EDTA-FeNa trihydrate
- CAS No. 15708-41-5
- $C_{10}H_{12}FeN_2NaO_8 \cdot 3H_2O$ • FW 421.10

Product No.	Packing	Price(₩)
359	25g	7,800
361	500g	12,500

Ethylenediaminetetraacetic acid disodium salt dihydrate Extra Pure



EDTA-2Na dihydrate
- CAS No. 6381-92-6 • EC No. 205-358-3
- $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$ • FW 372.24

- Solub.in H_2O 100 g/l (20℃) • pH value 4-5 (50g/l, H_2O, 20℃) • Melting point 110℃(release of crystalline water) • Bulk density ~700kg/m³

- IMDG No Dangerous Good
- HS Code 2922 49 95 • RTECS AH4410000

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 4.2 ~ 4.8
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.04%
Lead (Pb) ····· Max 5ppm
Iron(Fe) ····· Max 5ppm

Product No.	Packing	Price(₩)
378	500g	12,500
3607	1kg	21,000
381	20kg	260,000

Ethylenediaminetetraacetic acid tetrasodium salt tetrahydrate Extra Pure

EDTA-4Na tetrahydrate
- CAS No. 13235-36-4
- $C_{10}H_{12}N_2Na_4O_8 \cdot 4H_2O$ • FW 452.23

Appearance ····· White~Light-Yellowish crystal.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
pH(5%) ····· 10.6 ~ 11.6
Iron(Fe) ····· Max 0.0005%
Lead(Pb) ····· Max 0.0005%

Product No.	Packing	Price(₩)
368	500g	11,000
1987	1kg	17,500
1989	20kg	275,000

N-Ethylethanamine → *go to Diethylamine*

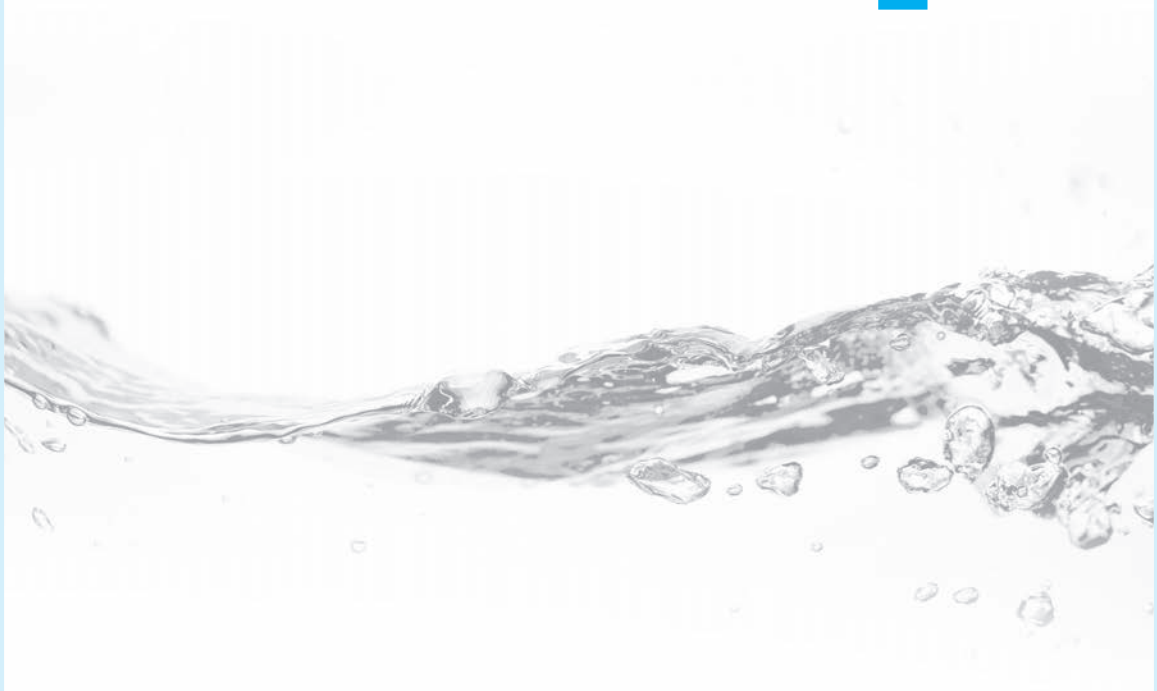
Ethyl Silicate28 → *go to Tetraethyl 0-silicate*

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

F



Alphabetical list Numbers

List of F

Product	Page
Fehling Solution A	139
Fehling Solution B	139
Ferric ammonium citrate	139
Ferric ammonium sulfate	139
Ferric Chloride anhydrous	139
Ferric Chloride hexahydrate	139
Ferric Nitrate nonahydrate	139
Ferric Oxide red	139
Ferroin solution	139
Ferrous ammonium sulfate	139
Ferrous Chloride tetrahydrate	139
Ferrous Sulfate heptahydrate	140
Ferrous Sulfide	140
Fluorescein	140
Fluoroammonium	140
FluoroBoric acid	140
Formaldehyde solution	140
Formalin	140
Formamide	141
Formic acid	141
Formic acid amide	141
p–Formyldimethylaniline	141
D(–)–Fructose	141
Fuchsin Acid for Microscopy	141
Fuchsin Basic	141
Fuchsin Basic Solution	141
2–Furancarbaldehyde	141
Furfuryl Alcohol	142
2,5–Furanedione	142
Furfural	142

Fehling Solution A — Indicator solution

페링용액A

Product No.	Packing	Price(₩)
649	500㎖	8,800

Fehling Solution B — Indicator solution

페링용액B

Product No.	Packing	Price(₩)
652	500㎖	8,800

Ferric ammonium citrate → *go to Ammonium Iron(III) citrate, brown*

Ferric ammonium sulfate
→ *go to Ammonium Iron(III) sulfate dodecahydrate*

Ferric Chloride anhydrous — Extra Pure

염화제이철, 무수 Iron(Ⅲ) Chloride anhydrous
● CAS No. 7705-08-0 ● EC No. 231-729-4
● $FeCl_3$ ● FW 162.21

● Vapour pressure 1 hPa(20℃) ● Spec. density 2.9g/cm³(20℃) ● Solub.in H_2O 920g/l (20℃) (hydrolysis) ●pH value 1(200g/l, H_2O, 20℃) ● Melting point360℃(decomposition) ● Bulk density 1000kg/m³

● IMDG UN 1773 FERRIC CHLORIDE, ANHYDROUS, 8, III
● HS Code 2827 39 20 ● Merck Index 10, 3943

Solubility in water ····· To pass test
Free acid ····· To pass test
Nitrate (NO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.02%
Phosphate (PO_4) ····· Max 0.03%
Ferrous ion (Fe^{2}) ····· To pass test
copper (Cu) ····· Max 0.01%
Zinc (Zn) ····· Max 0.02%
Substances not precipitated by NH_4OH ····· Max 0.2%
Arsenic (As) ····· Max 0.001%
Assay ····· 97.0 ~103.0%

Product No.	Packing	Price(₩)
660	500g	15,000
2017	20kg	337,500

Ferric Chloride hexahydrate — Extra Pure

염화제2철6수화물, Iron(Ⅲ) Chloride hexahydrate
● CAS No. 10025-77-1 ● EC No. 231-729-4
● $FeCl_3 \cdot 6H_2O$ ● FW 270.32

● Solub.in H_2O 920g/l (20℃) ●pH value ~1.8(10g/l, H_2O, 25℃) ● Melting point37℃ ● Bulk density ~600-1200kg/m³

● IMDG No dangerous Goodl
● HS Code 2827 39 20 ● RTECS NO5425000

Appearance ····· Yellow ~ brown crystal lump. to deliquescent.
Assay ····· Min 97.0%
Solubility in dil. HCl ····· To pass test
Acidity ····· To pass test
Nitrate (NO_3) ····· To pass test
Phosphate (PO_4) ····· Max 0.03%
Sulfate (SO_4) ····· Max 0.02%
Copper (Cu) ····· Max 0.01%
Zinc (Zn) ····· Max 0.01%
Arsenic (As) ····· Max 0.001%
Iron (II) (Fe^{2}) ····· To pass test

Product No.	Packing	Price(₩)
97	500g	13,800
98	1kg	24,000

Ferric Nitrate nonahydrate — Extra Pure

질산제이철, Iron(Ⅲ) Nitrate nonahydrate
● CAS No. 7782-61-8 ● EC No. 233-89-5
● $Fe(NO_3)_3 \cdot 9H_2O$ ● FW 404.00

● Spec. density 1.68g/cm³(20℃) ● Solub. in H_2O (20℃) soluble ●pH value ~1.3 (100g/l, H_2O, 20℃) ● Melting point 47℃ ● Bulk density ~900kg/m³

● IMDG UN 1466 FERRIC NITRATE, 5.1, III
● HS Code 2834 29 80 ● Merck Index 10, 3955

Appearance ····· Pale purple crystal.to deliquescent.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.02%
Copper (Cu) ····· Max 0.005%
Zinc (Zn) ····· Max 0.02
Arsenic (As) ····· Max 0.001%

Product No.	Packing	Price(₩)
665	500g	8,800
4288	1kg	16,000

Ferric Oxide red — CP

산화제이철, Iron(Ⅲ) Oxide
● CAS No. 1309-37-1 ● EC No. 215-168-2
● Fe_2O_3 ● FW 159.69

● Spec. density 5.2g/cm³ ● Solub. in H_2O (20℃) insoluble ●pH value ~5 (40g/l, H_2O, 20℃)(slurry) ● Melting point 1565℃ ● Bulk density ~700kg/m³

● IMDG No dangerous Good
● HS Code 2821 10 00 ● RTECS NO7400000 ● Merck Index 10, 3956

Product No.	Packing	Price(₩)
673	500g	7,500

Ferroin solution — Normal

페로인용액

Product No.	Packing	Price(₩)
676	500㎖	45,000

Ferrous ammonium sulfate
→ *go to Ammonium Iron(II) sulfate hexahydrate*

Ferrous Chloride tetrahydrate — Extra Pure

염화제일철, Iron(II) Chloride tetrahydrate
● CAS No. 13478-10-9
● $FeCl_2 \cdot 4H_2O$ ● FW 198.83

Product No.	Packing	Price(₩)
1182	500g	12,500

F

Ferrous Sulfate heptahydrate — Extra Pure

황산제일철7수화물, Iron(II) Sulfate heptahydrate

- CAS No. 7782-63-0 • EC No. 231-753-5
- $FeSO_4 \cdot 7H_2O$ • FW 278.02

- Spec. density 1.89g/cm³(20℃) • Solub.in H_2O 400g/l (20℃) • pH value 3-4(50g/l, H_2O, 20℃) • Melting point < 60℃(release of crystalline water) • Bulk density~600kg/m³

- IMDG No dangerous Good
- HS Code 2833 29 50 • RTECS NO8510000 • Merck Index 10, 3992

Appearance ····· light-green Crystals or crystalline powder, Are weathering out of the air.
Assay ····· 98.0 ~ 102.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.005%
Copper (Cu) ····· Max 0.005%
Zinc (Zn) ····· Max 0.02%
Arsenic (As) ····· Max 3ppm
Ferrous ion (Fe^3) ····· Max 0.2%

Product No.	Packing	Price(₩)
681	500g	4,400
684	1kg	7,500
687	25kg	75,000

Ferrous Sulfide

황화제일철, Iron(II) Sulfide

- CAS No. 1317-37-9 • EC No. 215-268-6
- FeS • FW 87.92

- Spec. density 4.84g/cm³(20℃) • Solub.in H_2O (20℃)insoluble • Melting point 1195℃ • Bulk density~1500-2000kg/m³

- IMDG No dangerous Good
- HS Code 2830 90 11

Appearance ····· Dark gray or gray – black solid lump. Is insoluble in water.
Assay ····· Min 50.0%

Ferrous Sulfide — CP

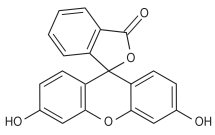
Product No.	Packing	Price(₩)
689	500g	5,300

Ferrous Sulfide — Extra Pure

Product No.	Packing	Price(₩)
5661	500g	Call

NEW

Fluorescein — Extra Pure



플루오레세인, Dihydroxyfluorane

- CAS No. 2321-07-5 • EC No. 219-031-8
- $C_{20}H_{12}O_5$ • FW 332.31

- Melting point 314 – 316 ℃
- Bulk density ~530 kg/m³

- IMDG NO Dangerous Good • HS Code 3204 12 00
- RTECS LM5075000 • Merck Index 10, 4060

Product No.	Packing	Price(₩)
5151	25g	7,000

Fluoroammonium → *go to Ammonium Fluoride*

Fluoroboric acid — CP

플루오로보릭산, Tetrafluoroboric acid

- CAS No. 16872-11-0
- HBF_4 • FW 87.83

Product No.	Packing	Price(₩)
702	500g	9,000

Formaldehyde solution → *go to Formaline*

Formalin

포르마린(폼알데하이드용액), Formaldehyde Solution

- CAS No. 50-00-0
- HCHO • FW 30.03

Formalin — Extra Pure

Appearance ····· Clear,colorless liquid
Assay ····· 35.0 ~ 40.0%
Ignition residue (as Sulfate) ····· Max 0.01%
Acidity (as HCOOH) ····· Max 0.1%
Chloride (Cl) ····· Max 0.001%
Sulfate (SO_4) ····· Max 0.01%
Lead (Pb) ····· Max 0.002%
Methanol(안정제) ····· 5.0 ~ 15.0%
Iron (Fe) ····· Max 0.0002%

Product No.	Packing	Price(₩)
716	500g	3,800
717	1kg	5,600
718	20kg	27,500

Formalin — GR

Appearance ····· Clear,colorless liquid
Assay ····· 36.0 ~ 38.0%
Ignition residue (as Sulfate) ····· Max 0.002%
Acidity (as HCOOH) ····· Max 0.04%
Chloride (Cl) ····· Max 2 ppm
Sulfate (SO_4) ····· Max 0.002%
Copper (Cu) ····· Max 2 ppm
Lead (Pb) ····· Max 2 ppm
Iron (Fe) ····· Max 2 ppm
Methanol(Stabilizer) ····· 5 ~ 15%

Product No.	Packing	Price(₩)
3955	2.5ℓ	11,300

Formalin — KP

성상 ····· 이 약은 무색의 액으로 그 기체는 점막을 자극한다. 이 약은 물 또는 에탄올에 섞인다.
확인시험 1 ····· 이 약 2ml에 물 10ml 및 질산은암모니아시액 1ml를 넣을 때 회색침전이 생기거나 관벽에 은경이 생긴다.
확인시험 2 ····· 이 약 2방울을 살리실산 0.1g,황산 5ml에 녹인 액에 넣고 가온할때 액은 지속하는 적색을 나타낸다.

산 ····· 이 액 20ml에 물20ml를 넣고, 0.1mol/L 5.0ml 및 브롬티몰블루액 2방울을 넣을때 액은 청색이다.
강열잔분 ····· Max 0.06%
Methanol(안정제) ····· 5.0 ~ 13.0%
함량 ····· Min 35.0 ~ 38.0%

Product No.	Packing	Price(₩)
3757	500g	2,900
3758	1kg	4,400

Formamide — Extra Pure

폼아마이드, Formic acid amide
● CAS No. 75-12-7 ● EC No. 200-842-0
● $HCONH_2$ ● FW 45.04

● Vapour pressure 0.08hPa(20℃) ● Spec. density 1.13 g/cm³(20℃) ● Explosive limit 2.7-19Vol% ● Flash point 175℃o.c. ● Solub.in H_2O(20℃)soluble ● pH value 4-5(200 g/l, H_2O, 20℃) ● Melting point 2℃ ● Boiling point ~210℃(1013 hPa) ● Ignition temp. 500℃(DIN51794)

● IMDG No Dangerous Good
● HS Code 2924 19 00

Product No.	Packing	Price(₩)
720	500g	8,800

Formic acid

개미산, Methanoic acid
● CAS No. 64-18-6 ● EC No. 200-579-1
● HCOOH ● FW 46.03

● Vapour pressure 42hPa(20℃) ● Spec. density 1.22 g/cm³(20℃) ● Explosive limit 12-38Vol% ● Flash point 48℃c.c. ● Solub.in H_2O(20℃) soluble ● pH value. 22(10 g/l, H_2O, 20℃) ● Saturation conc. 80g/m³ ● Melting point 8℃ ● Boiling point 101℃ ● Ignition temp. 480℃(DIN51794)

● IMDG UN 1779 FORMIC ACID MORE THAN 85%, 8 (3), II
● HS Code 2915 11 00 ● RTECS LQ4900000
● 4류 제2석유류(수용성액체) 2000ℓ ● Merck Index 10, 4123

Appearance ····· Clear, Colorless liquid.Stinging strong smell.
Assay ····· Min 85.0%
Solubility in water ····· To pass test
Residue after evaporation ····· Max 0.02%
Acetic acid(CH_3COOH) ····· Max 0.5%
Chloride (Cl) ····· Max 50ppm
Sulfate (SO_4) ····· Max 0.01%
Lead(Pb) ····· Max 20ppm

Formic acid — Extra Pure

Product No.	Packing	Price(₩)
722	500g	5,600
724	1kg	8,800
1962	20kg	75,000
4077	2.5ℓ	13,800

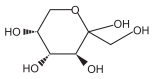
Formic acid — GR

Product No.	Packing	Price(₩)
4197	2.5ℓ	26,300

Formic acid amide → *go to Formamide*

p-Formyldimethylaniline → *go to p-Dimethylaminobenzaldehyde*

D(-)-Fructose — Extra Pure



D-과당, Laevulose, Levulose
● CAS No. 57-48-7 ● EC No. 200-333-3
● $C_6H_{12}O_6$ ● FW 180.16

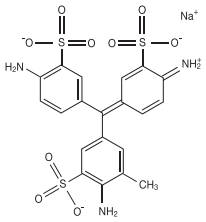
● Spec. density 1.59 g/cm³(20℃)(OECD109) ● Explosive limit 60g/m³ ● Solub.in H_2O 790g/l(20℃) (OECD 105) ● pH value~5-6(100 g/l, H_2O, 20℃) ● Melting point100-104℃(OECD 102) ● Bulk density~700-800kg/m³ ● Ignition temp. 360℃

● IMDG No Dangerous Good ● HS-Code 1702 50 00

Product No.	Packing	Price(₩)
727	25g	3,800
729	500g	9,400

Fuchsin acid — Extra Pure

NEW



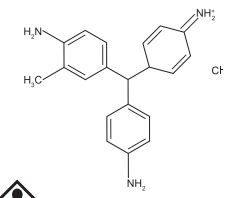
후크신산
● CAS No. 3244-88-0 ● EC No. 221-816-5
● $C_{20}H_{17}N_3Na_2O_9S_3$ ● FW 585.54

● Solub. in H_2O 116 mg/l (20℃) ● pH value ~3 - 4 (10 g/l, H_2O, 20 ℃) ● Melting point 〉 130 ℃(decomposition) ● Bulk density ~ 920 kg/m³

● IMDG NO Dangerous Good ● HS Code 3204 12 00
● RTECS DD4737000

Product No.	Packing	Price(₩)
5152	25g	30,000

Fuchsin Basic — Indicator



후크신(염기성), CI 42510
● CAS No. 632-99-5 ● EC No. 211-189-6
● $C_{20}H_{20}ClN_3$ ● FW 337.85

● Solub.in H_2O 4 g/l(25℃) ● pH value 5-6 (1g/l, H_2O, 25℃) ● Melting point ~235℃(decomposition) ● Bulk density ~500kg/m³

● IMDG No dangerous Good
● HS Code 3204 13 00 ● RTECS CX9850000 ● Merck Index 10, 4179

Product No.	Packing	Price(₩)
736	25g	7,000

Fuchsin Basic Solution — Indicator Solution

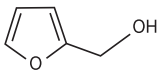
Product No.	Packing	Price(₩)
738	500㎖	10,000

2-Furancarbaldehyde → *go to Furfural*

F

NEW

Furfuryl Alcohol — Extra Pure



2-푸릴메탄올, 2-Furanmethanol
● CAS No. 98-00-0 ● EC No. 202-626-1
● $C_5H_6O_2$ ● FW 98.1

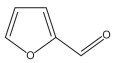
● Vapour pressure 0.53 hPa (20 ℃) ● Spec. density 1.13 g/cm³ (20 ℃) ● Explosive limit 1.8 – 16.3 Vol% ● Flash point 65 ℃ ● Solub. in H_2O (20℃) soluble ● pH value 6 (300 g/l, H_2O, 20 ℃) ● Saturation conc. 2.1 g/m³ (20 ℃) ● Melting point -31 ℃ ● Boiling point 170 – 171 ℃ ● Ignition temp. 390 ℃

● IMDG UN 2874 FURFURYL ALCOHOL, 6.1, III ● HS Code 2932 13 00
● RTECS LU9100000 ● Merck Index 10, 4180l ● 제4류 2석유류

Product No.	Packing	Price(₩)
5153	1 ℓ	18,500

2,5-Furanedione → *go to Maleic Anhydride*

Furfural — Extra Pure



퍼츄랄, 2-Furancarbaldehyde
● CAS No. 98-01-1 ● EC No. 202-627-7
● $C_5H_4O_2$ ● FW 96.09

● Vapour pressure 1hPa(20℃) ● Spec. density 1.16g/cm³(20℃) ● Explosive limit 2.1-19.3Vol% ● Flash point 60℃(DIN51758) ● Solub.in H_2O 83 g/l(20℃) ● Saturation conc. 5.8g/m³ ● Melting point -37℃ ● Boiling point 162℃ ● Ignition temp 315℃

● IMDG UN 1199 FURALDEHYDES, 6.1 (3), II
● HS Code 2932 12 00 ● RTECS LT7000000 ● Merck Index 10, 4179

Product No.	Packing	Price(₩)
741	500g	12,000

F

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

G

Alphabetical list Numbers

List of G

Product	Page
Gallic Acid monohydrate	145
Gelatin	145
Gentian Violet	145
Gibberellic Acid	145
Giemsa's Stain	145
Giemsa's Staining Solution	145
Glass Beads (3.5–4.5 mm)	145
Glass Wool	145
D–Gluconic acid calcium salt monohydrate	145
D(+)–Glucose	145
L–Glutamic Acid	146
L(+)–Glutamic Acid monosodium salt	146
L(+)–Glutamine	146
Glycerin	146
Glycerol	147
Glycerol Triacetate	147
Glycine	147
Glycolic Acid	147
Glycolmethacrylate	147
Glyoxaline	147
Gooch crucibles	147
Graphite powder	147
Guanidine Hydrochloride	148
Guar Gum	148

Gallic Acid monohydrate — Extra Pure

● CAS No. 5995-86-8 ● EC No. 215-268-6
● $C_7H_8O_6$; $(HO)_3C_6H_2COOH \cdot H_2O$ ● FW 188.14

Appearance ····· White or Light-Yellowish White Crystal or powder.
Solubility in water ····· To pass test
Loss on drying (at 105 ℃) ····· Max 10%
Ignition residue (as Sulfate) ····· Max 0.1%
Sulfate (SO_4) ····· Max 0.02%
Tannic Acid ····· To pass test

Product No.	Packing	Price(₩)
750	500g	35,000

Gelatin — Extra Pure

젤라틴

● CAS No. 9000-70-8 ● EC No. 232-554-6

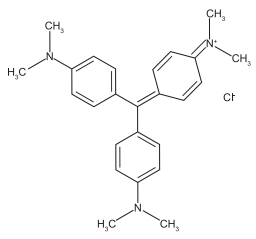
● Solub.in H_2O (20℃) (swelling) ● pH value ~3.8-7.6(10g/l, H_2O, 25℃) ● Bulk density~580kg/m³ ● Boiling point 100℃

● IMDG No Dangerous Good
● HS Code 3503 00 10

Appearance ····· Colorless or white ~ pale yellow thin, granulated or powdered. No smell, and taste.
Loss on drying ····· Max. 15.0
Ignition residue (as Sulfate) ····· Max. 2.0
Insoluble article or strange odor ····· To pass test
Sulfide (SO_2) ····· Max 0.0225%
Heavy Metals (as Pb) ····· Max 50ppm
Arsenic (As) ····· Max 1ppm
Mercuric (Hg) ····· Max 0.1ppm
Jelly strength (g/㎠) ····· To pass test

Product No.	Packing	Price(₩)
752	500g	11,000

Gentian Violet — Indicator



젠티안바이올렛, Crystal Violet, CI 42555

● CAS No. 548-62-9
● EC No. 208-953-6
● $C_{25}H_{30}ClN_3$ ● FW 407.99

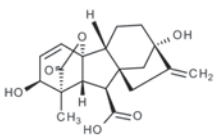
● Spec. density 1.19g/cm³(20℃) ● Solub. in H_2O 10g/l(20℃) ● pH value 2.5-3.5(10g/l H_2O 20℃) ● Melting point 189-194℃
● Bulk density~220-400kg/m³

● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S(CONT. HEXAMETHYLENE PARAROSANILIN CHLORIDE), 9, III
● HS Code 3204 13 00 ● Merck Index 10, 4254

Appearance ···· Gold luster, dark yellow, green crystals or crystalline powder.
Insoluble matter ····· Max. 1.0%
Loss on drying (at.105℃,4hr.) ····· Max 10.0%
Ignition residue (as Sulfate) ····· Max 1.0%
Heavy metals(as Pb) ····· Max 0.005%
Zinc(Zn) ····· Max 0.2%

Product No.	Packing	Price(₩)
754	25g	7,500

Gibberllic acid — Extra Pure NEW



기버렐릭산

● CAS No. 77-06-5 ● EC No. 201-001-0
● $C_{19}H_{22}O_6$ ● FW 346.37

● Spec. density 1.34 g/cm³ (20 ℃) ● Solub. in H_2O 5 g/l (25 ℃) ● Melting point 233 – 235 ℃

● IMDG NO Dangerous Good ● HS Code 2932 29 85
● Merck Index 10, 4276

Product No.	Packing	Price(₩)
5154	25g	90,000

Giemsa`s Stain — Extra Pure NEW

김사스테인

● CAS No. 51811-82-6

Product No.	Packing	Price(₩)
5155	25g	30,000

Giemsa`s Staining Solution — Extra Pure NEW

김사스테인 솔루션

● CAS No. 51811-82-6

Product No.	Packing	Price(₩)
5156	100㎖	13,500

Glass Beads (3.5-4.5 mm) — Extra Pure

유리구슬 3.5~4.5mm

Product No.	Packing	Price(₩)
5157	25g	18,000

NEW

Glass Wool — CP

유리솜

● CAS No. 65997-17-3 ● EC No. 206-046-0

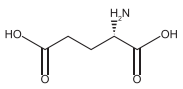
Product No.	Packing	Price(₩)
758	500g	12,500

D-Gluconic acid calcium salt monohydrate
→ *go to Calcium Gluconate*

D(+)-Glucose → *go to Dextrose anhydrous*

G

L-Glutamic Acid GR



L-구루타민산, L-α-Aminoglutaric acid
● CAS No. 56-86-0 ● EC No. 200-293-7
● $HOOC(CH_2)_2CH(NH_2)COOH$ ● FW 147.13

● Spec. density 1.54 g/cm³(20℃) ● Solub.in H_2O 11.1g/l(20℃) ● pH value 43.0-3.5(8.6 g/l, H_2O, 25℃) ● Bulk density 460 kg/cm³

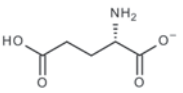
● IMDG No Dangerous Good
● HS Code 2924 19 00 ● RTECS LZ9700000

Appearance	White crystal or crystalline powder.
Assay	Min 99.0%
Solubility in dil. HCl	To pass test
Specific rotation (α) 20 D	+31.5 ~ +32.5
Loss on drying (at 105 ℃)	Max 0.2%
Ignition residue (as Sulfate)	Max 0.05%
Chloride (Cl)	Max 0.02%
Sulfate (SO_4)	Max 0.01%
Heavy metals (as Pb)	Max 0.001%
Arsenic (As)	Max 1ppm
Iron (Fe)	Max 0.001%
Ammonium (NH_4)	Max 0.02%

Product No.	Packing	Price(₩)
772	500g	43,000

NEW

L(+)-Glutamic Acid monosodium salt Extra Pure



Chiral

Na⁺

구루타민산나트륨1수화물
● CAS No. 6106-04-3 ● EC No. 205-538-1
● $C_5H_8NNaO_4 \cdot H_2O$ ● FW 187.13

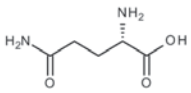
●Flash point 〉 900 ℃ ●Solub. in H_2O 600 g/l (20℃) ●Melting point 〉 200 ℃(sublimed) ●Bulk density ~ 680 kg/m³ ●pH value 6.7 – 7.2 (50 g/l, H_2O, 20 ℃)

●IMDG NO Dangerous Good ●HS Code 2922 42 00
● Merck Index 10, 6108

Product No.	Packing	Price(₩)
5158	500g	8,800

NEW

L(+)-Glutamine Extra Pure



Chiral

L-구루타민
●CAS No. 56-85-9 ●EC No. 200-292-1
●$C_5H_{10}N_2O_3$ ● FW 146.15

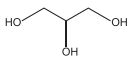
●Solub. in H_2O 26 g/l (18 ℃) ●pH value 4.0 – 6.0 (25 g/l, H_2O, 20 ℃) ●Melting point 185 – 186 ℃ ●Bulk density ~ 640 kg/m³

●IMDG NO Dangerous Good ● HS Code 2924 19 00
●RTECS MA2275100

Appearance	White ~ light Yellow powder.
Assay (by GC)	Min 99.0%
Solubility in water	To pass test
Other amino acid	To pass test
Heavy metals (as Pb)	Max 0.001%

Product No.	Packing	Price(₩)
4939	25g	11,300

Glycerin



글리세린, Glycerol
● CAS No. 56-81-5 ● EC No. 200-289-5
● $CH_2(OH)CH(OH)CH_2OH$ ● FW 92.09

● Vapour pressure <0.001hPa(20℃) ● Spec. density 1.26g/cm³(20℃) ● Explosive limit 2.6-11.3Vol% ● Flash point ~180℃o.c. ● Solub.in H_2O (20℃)soluble ● pH value ~5(100 g/l, H_2O, 20℃) ● Melting point 18℃ ● Boiling point 290℃(1013hPa)(decomposition) ● Ignition temp. 400℃

● IMDG No Dangerous Good
● HS Code 2905 45 00 ● RTECS MA8050000 ● Merck Index 10, 4347

Glycerin Extra Pure

Appearance	Clear,Viscous colorless liquid
Assay (by GC)	Min 99.0%
Ignition residue (as Sulfate)	Max 0.015%
Acidity (as CH_3COOH)	Max 0.004%
Alkalinity (as NH_3)	Max 5ppm
Chloride (Cl)	Max 10ppm
Sulfate (SO_4)	Max 20ppm
Heavy Metals (as Pb)	Max 4ppm
Iron(Fe)	Max 3ppm
Arsenic (As)	Max 2ppm
Ammonium (NH_4)	To pass test
Acrolein & Glucose	To pass test
Fatty acid esters (Glyceryl rebutyrate)	Max 0.2%
Glyceraldehyde	To pass test
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
779	500g	7,500
781	1kg	12,500
782	20kg	68,800
2043	250kg	Call

Glycerin GR

Appearance	Clear,Viscous colorless liquid
Assay (by GC)	Min 99.0%
Water	Max 1.0%
Ignition residue (as Sulfate)	Max 0.005%
Acidity (as CH_3COOH)	Max 0.002%
Alkalinity (as NH_3)	Max 4ppm
Chloride (Cl)	Max 1ppm
Sulfate(SO_4)	Max 5ppm
Heavy Metals (as Pb)	Max 1ppm
Iron(Fe)	Max 1ppm
Arsenic (As)	Max 1ppm
Ammonium (NH_4)	Max 5ppm
Acrolein & Glucose	To pass test
Fatty acid esters (Glyceryl rebutyrate)	Max 0.05%
Glyceraldehyde	To pass test
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
777	1kg	14,600
3834	2.5ℓ	25,000

Glycerin KP

성상	무색이며 맑고 끈기 있는 액으로 냄새는 없다. 물 또는 에탄올과 섞인다.
확인시험	황산수소칼륨을 넣어 가열할때 아크롤레인의 냄새가 난다.
굴절률 n 20 D	Min 1.470
비중 d 20/20	Min 1.258℃
순도시험	
색	액의 색은 비교액보다 진하지 않다.
액성	액은 중성이다.
염화물	Max 0.001%
황산염	Max 0.002%

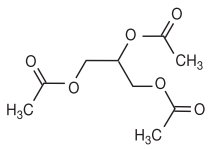
암모늄 ····· 발생하는 기체는 적신 리트머스시험지를 청색으로 변화시키지 않는다.
중금속 ····· Max 5ppm
칼슘 ····· 액은 변하지 않는다.
비소 ····· Max 2ppm
아크롤레인, 포도당 또는 기타 환원성 물질 ···· 액은 변색하거나 혼탁하지 않는다.
에틸렌글리콜 및 디에틸렌글리콜
에틸렌글리콜 ····· Max 0.10%
디에틸렌글리 ····· Max 0.10%
유연물질
개개 유연물질 ····· Max 0.1%
총 유연물질 ····· Max 1.0%
염소화합물 ····· Max 0.03%
지방산 또는 지방산에스텔 ·· 0.1 mol/L 수산화나트륨액 소비량은 3.0mL 이하이다.
황산에 대한 정색물 ····· 액의 색은 H보다 진하지 않다.
수분 ····· Max 2.0%
강열잔분 ····· Max 0.01%
함량 (비중에 의한다) ····· 98.0~101.0%

Product No.	Packing	Price(₩)
784	20kg	75,000
2046	200kg	Call

Glycerol → *go to Glycerin*

NEW

Glycerol Triacetate — Extra Pure



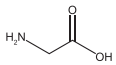
글리세롤트리아세테이트, Triacetin
● CAS No. 102-76-1 ● EC No. 203-051-9
● $C_9H_{14}O_6$ ● FW 218.20

● Vapour pressure 〈 0.1 hPa (20 ℃) ● Spec. density 1.155 g/cm³ (20 ℃) ● Explosive limit 1.1 – 7.7 Vol% ● Flash point 138 ℃ ● Solub. in H_2O 64 g/l (20℃) ● pH value 5.0 – 6.0 (50 g/l, H_2O, 20 ℃) ● Melting point –78 ℃ ● Boiling point 258 ℃ ● Ignition temp. 433 ℃

● IMDG NO Dangerous Good ● HS Code 2915 39 30
● 제4류 3석유류

Product No.	Packing	Price(₩)
5160	1kg	41,000

Glycine — GR



글리신, Aminoacetic acid
● CAS No. 56-40-6 ● EC No. 200-272-2
● H_2NCH_2COOH ● FW 75.07

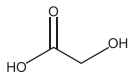
● Spec. density 1.595 g/cm³(20℃) ● Solub.in H_2O 225g/l(20℃) ● pH value5.9-6.4(50 g/l, H_2O, 20℃) ● Melting point 232-236℃(decomposition) ● Bulk density~920 kg/cm³

● IMDG No Dangerous Good
● HS Code 2922 49 10 ● RTECS MB7600000

Appearance ·· White crystal or crystalline powder. Dissolves in water. sweet.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Loss on drying(at.105℃,3hr.) ····· Max 0.2%
Ignition residue (as Sulfate) ····· Max 0.05%
Chloride (Cl) ····· Max 0.002%
Sulfate (SO_4) ····· Max 0.005%
Heavy metals (as Pb) ····· Max 0.001%
Arsenic (As) ····· Max 1ppm
Iron(Fe) ····· Max 5ppm
Other amino acid ····· To pass test

Product No.	Packing	Price(₩)
683	25g	4,400
686	500g	12,500
2041	1kg	23,000
688	15kg	187,500

Glycolic Acid



글리콜산, Hydroxyacetic acid
● CAS No. 79-14-1 ● EC No. 201-180-5
● $HOCH_2COOH$ ● FW 76.05

● Vapour pressure 10.8hPa(80℃) ● Spec. density 1.49 g/cm³(25℃) ● Flash point >300℃ ● Solub.in H_2O(20℃) soluble ● pH value ~2(50 g/l, H_2O, 20℃) ● Melting point 79℃ ● Bulk density ~600 kg/cm³ ● Boiling point 100℃(decomposition)

● IMDG UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S(GLYCOLLIC ACID), 8, II
● HS Code 2918 19 85 ● RTECS MC5250000 ● Merck Index 10, 4362

Glycolic Acid — Extra Pure

Product No.	Packing	Price(₩)
5053	500g	13,800

Glycolic Acid — CP

Product No.	Packing	Price(₩)
791	1kg	22,500

Glycolmethacrylate → *go to 2-Hydroxy Ethylmethacrylate*

Glyoxaline → *go to Imidazole*

Gooch crucibles → *go to Aluminium Oxide activated granule*

Graphite powder

흑연, 분말
● CAS No. 7782-42-5 ● EC No. 231-955-3
● C ● FW 12.01

● Spec. density 2.2 g/cm³(20℃) ● Solub.in H_2O(20℃)insoluble
● pH value 5-6(50 g/l, H_2O, 20℃)(slurry) ● Bulk density ~280 kg/cm³

● IMDG No Dangerous Good ● HS Code 3801 10 00 ● Merck Index 10, 4410

Fixed carbon ····· Min 70.0%
Ash ····· Max 25.0%
Volatile matter ····· Max 5.0%

Graphite powder — CP

Product No.	Packing	Price(₩)
798	500g	4,400

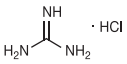
Graphite powder — Extra Pure

Product No.	Packing	Price(₩)
5660	500g	4,400

G

NEW

Guanidine Hydrochloride — Extra Pure



구아니딘 수화염화물

● CAS No. 50-01-1 ● EC No. 200-002-3

● $CH_5N_3 \cdot HCl$ ● FW 95.54

● Spec. density 1.344 g/cm³ (25 ℃) ● Solub. in H_2O 2150 g/l (20℃) ● pH value 4.5 – 5.5 (100 g/l, H_2O, 20 ℃) ● Melting point 185 ℃ ● Bulk density ~550 – 620 kg/m³

● IMDG NO Dangerous Good ● HS Code 2925 29 00

● RTECS MF4300000

Product No.	Packing	Price(₩)
5161	500g	17,500

Guar Gum — Extra Pure

구아검, Cyamopsis Gum

● CAS No. 9000-30-0

Appearance ····· White ~ yellowish white powder. Almost no smell.
Hydrochloric Acid insoluble Matter ····· Max 3.0%
Loss on drying(at.105 ℃, 5hr.) ····· Max 7.0%
Starch ····· To pass test
Heavy metals (as Pb) ····· Max 0.001%
Total ash(600℃) ····· Max 0.7
Arsenic (As) ····· Max 4ppm

Product No.	Packing	Price(₩)
3929	500g	30,000

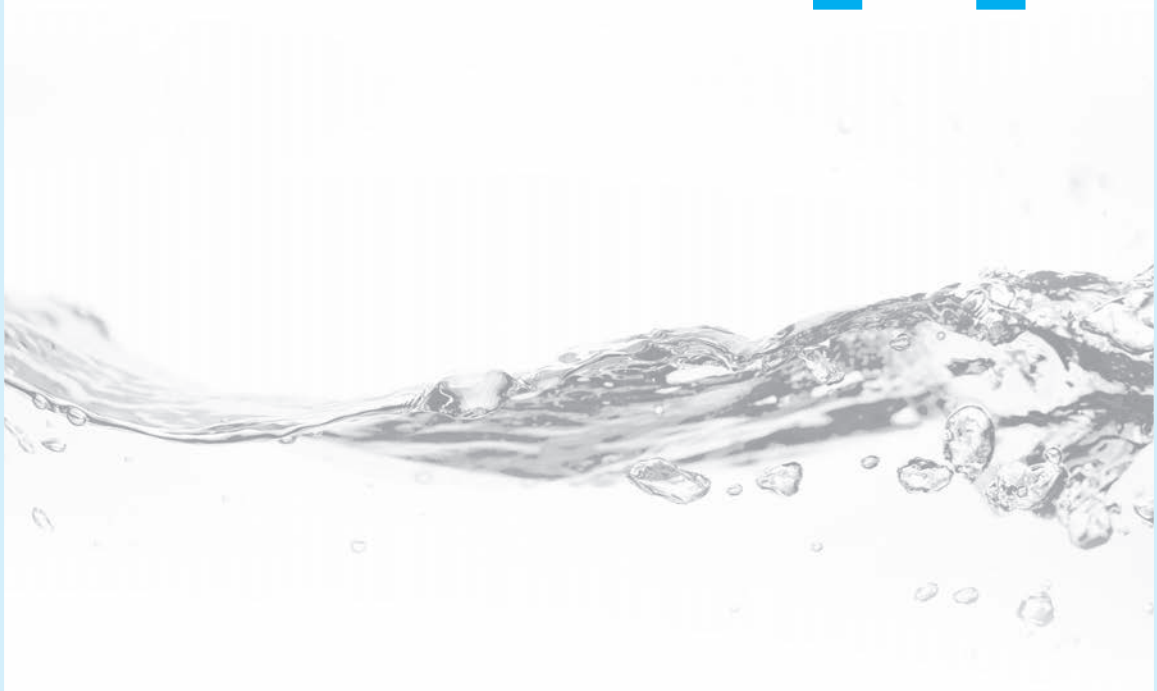
G

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

H



Alphabetical list Numbers

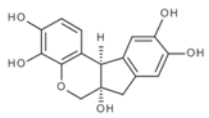
List of H

Product	Page
Hematoxylin Stain	151
n–Heptane	151
Hexadecanoic acid	151
1–Hexadecanol	151
Hexahydrobenzene	151
1,1,1,3,3,3–Hexamethyldisilazane	151
Hexanedioic acid	151
Hexanes	152
n–Hexane 95%	152
n–Hexane 98%	152
1–Hexane Sulfonic acid Sodium salt	153
Hexylene Glycol	153
Hippuric Acid	153
L–Histidine	153
L–Histidine monohydrochloride monohydrate	153
Hyamine 1622	153
Hydrazine hydrate	153
Hydrazine monohydrate	154
Hydrazine Sulfate	154
Hydrazinium Sulphate	154
Hydrochloric acid 37%	154
Hydrochloric Acid 10%	154
1N – Hydrochloric Acid (1M)	154
2N – Hydrochloric Acid (2M)	154
6N – Hydrochloric Acid (6M)	155
N/20 – Hydrochloric Acid (0.05M)	155
N/10–Hydrochloric Acid (0.1M)	155
N/10–Hydrochloric Acid (Ethanol Solution) (0.1M)	155
N/10–Hydrochloric Acid (2–Propanol Solution) (0.1M)	155
N/5 – Hydrochloric Acid (0.2M)	155
N/2 – Hydrochloric Acid (0.5M)	155
Hydrofluoric acid	155
Hydrogen Peroxide 30%	156
Hydroquinone	156
2–Hydroxy benzoic acid	156
2–Hydroxy Ethylmethacrylate	156
4–Hydroxy–3–methoxybenzaldehyde	156
Hydroxyacetic acid	156
o–Hydroxyaniline	156
2–Hydroxyethyl ether	156
Hydroxyl ammonium chloride	156
Hydroxylamine Hydrochloride	157
Hydroxylamine Sulfate	157
1–Hydroxynaphthalene	157
2–Hydroxynaphthalene	157
2–Hydroxypropanoic acid	157
3–Hydroxytoluene	157
Hydroxytricarballylic acid	157
8–Hydroxyquinoline	157
Hypophosphorous Acid	157

H

NEW

Hematoxylin Stain — Extra Pure



Chiral

헤마톡실린 염색

● CAS No. 517-28-2 ● EC No. 208-237-3

● $C_{16}H_{14}O_6$ ● FW 302.28

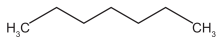
● Solub. in H_2O (20℃) slightly soluble ● Melting point 291 – 293 ℃(anhydrous substance)

● Bulk density ~ 500 kg/m³

● IMDG NO Dangerous Good ● HS Code 3203 00 10

Product No.	Packing	Price(₩)
5162	25g	112,500

n-Heptane



노말-헵테인

● CAS No. 142-82-5 ● EC No. 205-563-8

● $CH_3(CH_2)_5CH_3$ ● FW 100.21

● Vapour pressure 48hPa(20℃) ● Spec. density 0.68g/cm³(20℃) ● Explosive limit1-7Vol% ● Flash point-4℃c.c. ● Melting point -90.5℃ ● Boiling point 97-98℃(1013hPa) ● Ignition temp. 215℃

● IMDG UN 1206 HEPTANES, 3, II

● HS Code 2901 10 00 ● RTECS MI7700000

● 4류 제1석유류 (비수용성 액체) 200ℓ ● Merck Index 10, 4551

n-Heptane — Extra Pure

Appearance	Clear, Colorless liquid.
Assay(by GC, C7 Hydrocarbons)	Min 99.0%
Density (20℃)	0.681 ~ 0.687g/ml
Refractive index (n 20 D)	1.386 ~ 1.389
Residue after evaporation	Max 0.001%
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
805	500㎖	7,500
2055	1 ℓ	13,500
807	18 ℓ	112,500

n-Heptane — GR

Appearance	Clear, Colorless liquid.
Assay (by GC)	Min 99.0%
Density (20℃)	0.682 ~ 0.686g/ml
Refractive index (n 20 D)	1.386 ~ 1.389
Residue after evaporation	Max 0.001%
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
4342	2.5 ℓ	25,000
3029	4 ℓ	38,000
3551	18 ℓ	125,000

n-Heptane 99% — HPLC

Meets ACS Specification

Ultraviolet Spectrophotometry

Maximum Absorbance

197 nm	Max 1.00
200 nm	Max 0.75
215 nm	Max 0.20
254 nm	Max 0.014
UV Cutoff	Max 197nm
Assay (by GC, n-Heptane)	Min 99.0%
(total C 7 Hydrocarbons)	Min 99.9%
Color (APHA)	Max 10
Water	Max 0.02%
Residue after evaporation	Max 3ppm
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
2704	4 ℓ	68,800

n-Heptane 99% — PESTICIDE

Extraction-Concentration Suitability

ECD Detectable residue (as Heptachlor epoxide)	Max 10ppt
Assay (by GC, n-Heptane)	Min 99.0%
(total C 7 Hydrocarbone)	Min 99.9%
Color (APHA)	10
Water	0.02%
Residue after evaporation	3ppm

Product No.	Packing	Price(₩)
2703	4 ℓ	75,000

n-Heptane 99% — Ultimate

Extraction-Concentration Suitability

ECD Detectable residue (as Heptachlor epoxide)	Max 10ppt
FID Detectable residue (as 2-Octanol)	Max 5ppb
Ultraviolet Spectrophotometry	
Maximum Absorbance	
197 nm	Max 1.00
200 nm	Max 0.75
215 nm	Max 0.20
254 nm	Max 0.01
UV Cutoff	Max 197nm
Assay (by GC, n-Heptane)	Min 99.0%
(total C 7 Hydrocarbons)	Min 99.9%
Color (APHA)	Max 10
Water	Max 0.02%
Residue after evaporation	Max 1ppm
Fluorescecce Background	To pass test
Substances darkened by sulfuric acid	To pass test

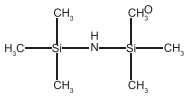
Product No.	Packing	Price(₩)
2702	4 ℓ	81,300

Hexadecanoic acid → *go to Palmitic acid*

1-Hexadecanol → *go to Cetyl Alcohol*

Hexahydrobenzene → *go to Cyclohexane*

1,1,1,3,3,3-Hexamethyldisilazane — CP



헥사메틸디실라잔, Bis(trimethylsilyl)amine

● CAS No. 999-97-3 ● EC No. 213-668-5

● $(CH_3)_3SiNHSi(CH_3)_3$ ● FW 161.39

● Vapour pressure 20hPa(20℃) ● Spec. density 0.78 g/cm³(20℃) ● Explosive limit 0.8-25.9Vol% ● Flash point 15℃c.c. ● Solub.in H_2O (20℃) (decomposition) ● Melting point -82℃ ● Boiling point 126℃ ● Ignition temp. ~325℃

● IMDG UN 3286 FLAMMABLE LIQUID, TOXIC,CORROSIVE, N.O.S (HEXAMETHYLDISILAZANE), 3 (6.1, 8), II

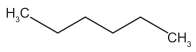
● HS Code 2931 00 95

Product No.	Packing	Price(₩)
2058	500㎖	48,000

Hexanedioic acid → *go to Adipic Acid*

H

Hexanes



노말-헥세인
- CAS No. 110-54-3 • EC No. 203-777-6
- $CH_3(CH_2)_4CH_3$ • FW 86.18

- Vapour pressure 160hPa(20℃) • Spec. density 0.66g/cm³(20℃) • Explosive limit1 1.0-8.1Vol%
- Flash point -22℃ c.c. • Solub.in H_2O 0.0095g/l(20℃)
- Saturation conc. 563g/m³ (20℃) • Melting point -94.3℃ • Boiling point 69℃(1013hPa) • Kin. viscosity 0.50 (20℃) • Ignition temp. 240℃(DIN51794)

- IMDG UN 1208 HEXANES, 3, II
- HS Code 2901 10 00 • RTECS MN2975000
- 4류 제1석유류 (비수용성 액체) 200ℓ

Hexanes — Extra Pure

Appearance ····· Volatile clear, colourless liquid, characteristic odor.
Assay (5 isomers total hexanes plus MCP) ····· Min 95.0%
Water ····· Max 0.07%
Residue after evaporation ····· Max 0.002%
Acidity (as CH_3COOH) ····· Max 0.002%
Fat ····· To pass test
Thiophene ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
2706	500mℓ	4,800
827	18 ℓ	42,500

Hexanes — GR

Product No.	Packing	Price(₩)
4085	4 ℓ	19,000

n-Hexane 95% — Extra Pure

Appearance ····· Volatile clear, colourless liquid, characteristic odor.
Assay (by GC) ····· Min 95.0%
Water ····· Max 0.07%
Residue after evaporation ····· Max 0.02%
Acidity (as CH_3COOH) ····· To pass test
Fat ····· To pass test
Thiophene ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
107	500mℓ	4,400
819	1 ℓ	7,000
2708	200 ℓ	675,000

n-Hexane 95% — GR

Appearance ····· Volatile clear, colourless liquid, characteristic odor.
Assay (by GC) ····· Min 96.0%
Water ····· Max 0.05%
Residue after evaporation ····· Max 0.001%
Acidity (as CH_3COOH) ····· Max 0.002%
Fat ····· To pass test
Thiophene ····· To pass test
Substances darkened by sulfuric acid ····· To pass test
Sulfide & reducing substances ····· To pass test

Product No.	Packing	Price(₩)
1647	1 ℓ	8,800
3871	2.5 ℓ	12,500
2939	4 ℓ	22,500
2061	18 ℓ	65,000
2944	20 ℓ	Call

n-Hexane 95% — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
195 nm ····· Max 1.00
210 nm ····· Max 0.25
220 nm ····· Max 0.075
254 nm ····· Max 0.005
UV Cutoff ····· Max 195nm
Assay (by GC, n-Hexane) ····· Min 95.0%
(total C 6 Hydrocarbons) ····· Min 99.8%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 3ppm
Water Soluble Titratable Acid ····· Max 0.0003mEq/g
Sulfur Compounds (as S) ····· Max 0.005%
Thiophene ····· To pass test

Product No.	Packing	Price(₩)
820	4 ℓ	35,000

n-Hexane 95% — Ultimate

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10ppt
FID Detectable Residue (as 2-Octanol) ····· Max 5ppt
Ultraviolet Spectrophotometry
Maximum UV Absorbance
197 nm ····· Max 1.00
210 nm ····· Max 0.25
220 nm ····· Max 0.075
254 nm ····· Max 0.005
UV Cutoff ····· Max 195 nm
Assay (by GC, n-Hexane) ····· Min 95.0%
(total C 6 Hydrocarbons) ····· Min 99.8%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 1 ppm
Fluorescence Background ····· To pass test
Water soluble titratable acid ····· Max 0.0003 mEq/g
Sulfur Compound(as S) ····· Max 0.005%
Thiophene ····· To pass test

Product No.	Packing	Price(₩)
1666	4 ℓ	43,800

n-Hexane 95% — PESTICIDE

Extraction-Concentration Suitability
ECD Detectable Residue (as Heptachlor Epoxide) ····· Max 10ppt
Assay (by GC, n-Hexane) ····· Min 95.0%
(total C 6 Hydrocarbons) ····· Min 99.8%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 5ppm

Product No.	Packing	Price(₩)
821	4 ℓ	37,500

n-Hexane 98% — EL

Assay ····· Min 98.0%
Water ····· Max 0.01%
Aluminum (Al) ····· Max 10 ppb
Arsenic (As) ····· Max 10 ppb
Barium (Ba) ····· Max 10 ppb
Cadmium (Cd) ····· Max 10 ppb
Calcium (Ca) ····· Max 10 ppb
Chromium (Cr) ····· Max 10 ppb
Cobalt (Co) ····· Max 10 ppb
Copper (Cu) ····· Max 10 ppb
Gold (Au) ····· Max 10 ppb

Iron (Fe) ····· Max 10 ppb
Lead (Pb) ····· Max 10 ppb
Lithium (Li) ····· Max 10 ppb
Magnesium (Mg) ····· Max 10 ppb
Manganese (Mn) ····· Max 10 ppb
Nickel (Ni) ····· Max 10 ppb
Potassium (K) ····· Max 10 ppb
Silver (Ag) ····· Max 10 ppb
Sodium (Na) ····· Max 10 ppb
Tin (Sn) ····· Max 10 ppb
Titanium (Ti) ····· Max 10 ppb
Tungsten (W) ····· Max 10 ppb
Vanadium (V) ····· Max 10 ppb
Zinc (Zn) ····· Max 10 ppb

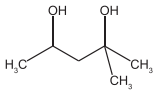
Product No.	Packing	Price(₩)
3557	140kg	Call

1-Hexane Sulfonic acid Sodium salt HPLC

● CAS No. 2832-45-3
● $C_6H_{13}NaSO_3$ ● FW 188.22

Product No.	Packing	Price(₩)
4591	25g	80,000

Hexylene Glycol GR



헥실렌글리콜, 2-Methyl-2, 4-pentanediol
● CAS No. 107-41-5 ● EC No. 203-489-0
● $CH_3CH(OH)CH_2C(CH_3)_2OH$ ● FW 118.18

● Vapour pressure 0.07hPa(80℃) ● Spec. density 0.92 g/cm³(20℃) ● Explosive limit 1-9.9Vol% ● Flash point 93℃c.c.(DIN51785) ● Solub.in H_2O (20℃) soluble ● Melting point -40℃ ● Boiling point 196℃ ● Ignition temp. 425℃(DIN51794)

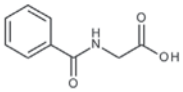
● IMDG No Dangerous Good
● HS Code 2905 39 10 ● Merck Index 10, 4607
● 4류 제3석유류 (수용성 액체) 4000ℓ

Appearance ····· Colorless slightly viscous liquid. Odors or smells a little strange.
Specific gravity (20 ℃) ····· 0.922 ~ 0.925
Heavy Metals (asPb) ····· Max 5ppm
Water ····· Max 1.0%
Acidity ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.01%
Arsenic (As) ····· Max 2ppm
Assay (by GC) ····· Min 99.0%

Product No.	Packing	Price(₩)
658	500㎖	8,800

NEW

Hippuric acid Extra Pure



히푸르산, N-Benzoylglycine
● CAS No. 495-69-2 ● EC No. 207-806-3
● $C_9H_9NO_3$ ● FW 179.17

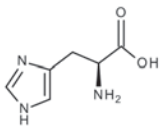
● Solub. in H_2O 3.26 g/l (20℃) ● Spec. density 1.371 g/cm³(20℃) ● pH value 2.5 - 3.5 (10 g/l, H_2O, 20 ℃) (slurry) ● Melting point 188 - 190 ℃ ● Bulk density ~ 630 kg/m³

● IMDG NO Dangerous Good ● HS Code 2924 29 98 ● RTECS MR8150000

Product No.	Packing	Price(₩)
5163	25g	9,400

L-Histidine Extra Pure

NEW



Chiral

L-히스티딘
● CAS No. 71-00-1 ● EC No. 200-745-3
● $C_6H_9N_3O_2$ ● FW 155.16

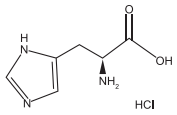
● Solub. in H_2O 38.2 g/l (20℃) ● Spec. density 1.44g/cm³(20℃) ● pH value ~ 7.7 (10 g/l, H_2O, 20 ℃) ● Melting point 272 - 273 ℃(decomposition) ● Bulk density ~ 430 kg/m³

● IMDG NO Dangerous Good ● HS Code 2933 29 90
● RTECS MS3070000

Appearance ····· White cystalline powder.
Assay ····· Min 98.5%
Other amino acid ····· Max 0.3%
Heavy metals (as Pb) ····· Max 0.001%
Ammonium (NH_4) ····· Max 0.01%

Product No.	Packing	Price(₩)
4940	25g	12,000

L-Histidine monohydrochloride monohydrate Indicator



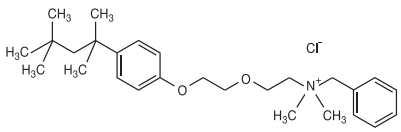
L-히스티딘 1염산1수화물
● CAS No. 5934-29-2 ● EC No. 211-438-9
● $C_6H_9N_3O_2 \cdot HCl \cdot H_2O$ ● FW 209.63

● Solub.in H_2O 169.9g/l (20℃) ● pH value 3.5-4.5 (100g/l H_2O 20℃) ● Melting point 259℃(decomposition) ● Boiling point 196℃ ● Ignition temp. 425℃(DIN51794) ● Bulk density ~700kg/m³

● IMDG No Dangerous Good
● HS Code 2933 29 90 ● RTECS MS3119000 ● Merck Index 10, 4617

Product No.	Packing	Price(₩)
837	25g	16,500

Hyamine 1622 Extra Pure



하이아민1622, Benzethonium chloride
● CAS No. 121-54-0 ● EC No. 204-479-9
● $C_{27}H_{42}ClNO_2$ ● FW 448.08

● Solub. in H_2O (20℃) freely soluble ● pH value 4.8 - 5.5 (10 g/l, H_2O) ● Melting point 164 - 166 ℃ ● Bulk density ~240 kg/m³

● IMDG UN 2923 CORROSIVE SOLID, TOXIC, N.O.S.(BENZETHONIUM CHLORIDE), 8 (6.1), III ● HS Code 2923 90 00

Product No.	Packing	Price(₩)
5164	25g	67,500

NEW

Hydrazine hydrate → *go to Hydrazine monohydrate*

H

Hydrazine monohydrate — Extra Pure

히드라진 1수화물, Hydrazine hydrate

- CAS No. 7803-57-8 • EC No. 206-114-9
- $NH_2NH_2 \cdot H_2O$ • FW 50.06

- Vapour pressure 20hPa(20℃) • Spec. density 1.03 g/cm³(20℃) • Explosive limit 3.4-100Vol% • Flash point 75℃o.c. • Solub.in H_2O (20℃) soluble • pH value ~11-13(24g/l H_2O 20℃) • Melting point -51.7℃ • Boiling point 120.5℃(1013hPa) • Ignition temp.280℃

- IMDG UN 2030 HYDRAZINE, AQUEOUS SOLUTION, 8(6.1), II
- HS Code 2825 10 00 • RTECS MV8050000
- 4류 제3석유류 • Merck Index 10, 4671

Appearance	Colorless, hygroscopic liquid. Unusual smell.
Assay	79.0 ~ 81.0%
Solubility in water	To pass test
Residue after evaporation	Max 0.05%
Chloride (Cl)	Max 0.03%
Sulfate (SO_4)	Max 0.01%
Heavy metals (as Pb)	Max 0.001%

Product No.	Packing	Price(₩)
838	500g	9,400
839	1kg	16,500
2063	18kg	146,300

NEW

Hydrazine Sulfate — GR / AR / ACS

히드라진 황산염, Hydrazinium Sulphate

- CAS No. 10034-93-2
- $N_2H_6SO_4$ • FW 130.12

Appearance	White powder.
Assay	Min 99.0%
Solubility in water	To pass test
Ignition residue (as Sulfate)	Max 0.05%
Chloride (Cl)	Max 0.001%
Copper (Cu)	Max 0.0005%
Iron (Fe)	Max 0.001%
Lead (Pb)	Max 0.0005%

Product No.	Packing	Price(₩)
4789	500g	12,500

Hydrazinium Sulphate → *go to Hydrazine Sulfate*

Hydrochloric acid 37%

염산, HCl

- CAS No. 7647-01-0 • EC No. 206-114-9
- HCl • FW 36.46

- Vapour pressure 190hPa(20℃) • Spec. density 1.19g/cm³(20℃) • Solub.in H_2O (20℃) soluble • pH value <1 (20℃)

- IMDG UN 1789 HYDROCHLORIC ACID, 8, II
- HS Code 2806 10 00 • Merck Index 10, 4671

Hydrochloric acid — EL

Assay (as HCl)	36.0 ~ 38.0%
Color	Max 10APHA
Residue after evaporation	Max 3ppm
Ammonium (NH_4)	Max 0.5ppm
Phosphate (PO_4)	Max 0.05ppm
Sulfate(SO_4)	Max 0.5ppm
Aluminum (Al)	Max 100ppb
Arsenic (As)	Max 5ppb
Barium (Ba)	Max 100ppb
Boron (B)	Max 50ppb
Cadmium (Cd)	Max 100ppb
Calcium (Ca)	Max 300ppb
Chromium (Cr)	Max 50ppb
Cobalt (Co)	Max 100ppb
Copper (Cu)	Max 10ppb
Gallium (Ga)	Max 50ppb
Germanium (Ge)	Max 100ppb
Gold (Au)	Max 100ppb
Iron (Fe)	Max 100ppb
Lead (Pb)	Max 100ppb
Lithium (Li)	Max 100ppb
Magnesium (Mg)	Max 100ppb
Manganese (Mn)	Max 100ppb
Nickel (Ni)	Max 50ppb
Potassium (K)	Max 100ppb
Silicon (Si)	Max 100ppb
Silver (Ag)	Max 100ppb
Sodium (Na)	Max 200ppb
Strontium(Sr)	Max 100ppb
Tin(Sn)	Max 100ppb
Zinc (Zn)	Max 100ppb
Particle Count (0.5 micron and above)	Max 100pcs/ml

Product No.	Packing	Price(₩)
1134	20kg	43,800
1135	200kg	Call
2065	3.8ℓ	8,800

Hydrochloric acid — Extra Pure

Appearance	Colorless liquid having a pungent odor.
Assay	35.0 ~ 37.0%
Ignition residue (as Sulfate)	Max 0.002%
Sulfate(SO_4)	Max 5ppm
Lead (Pb)	Max 2.5ppm
Arsenic (As)	Max 0.2ppm
Iron(Fe)	Max 0.8ppm

Product No.	Packing	Price(₩)
1128	500g	2,500
1129	1kg	4,380
1130	20kg	23,000

Hydrochloric acid — GR

Product No.	Packing	Price(₩)
4606	2.5ℓ	7,800

Hydrochloric Acid 10% — Solution

10%염산

Product No.	Packing	Price(₩)
1125	500㎖	2,900

1N - Hydrochloric Acid (1M) — Normal

1N(1M) 염산

Product No.	Packing	Price(₩)
1137	500㎖	5,000
1138	1ℓ	8,800

2N - Hydrochloric Acid (2M) — Normal

2N(2M) 염산

Appearance	To pass test
Factor (at 20℃)	1.000 ~ 1.005

Product No.	Packing	Price(₩)
1136	500㎖	6,400
2709	1ℓ	9,400

6N - Hydrochloric Acid (6M) Normal

6N(1M) 염산

Product No.	Packing	Price(₩)
3971	500㎖	7,000
3952	1ℓ	9,400

N/20 - Hydrochloric Acid (0.05M) Normal

N/20(0.05M) 염산

Appearance ····· To pass test
Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1118	500㎖	5,000

N/10-Hydrochloric Acid (0.1M) Normal

N/10(0.1M) 염산

Appearance ····· To pass test
Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1121	500㎖	5,600
1122	1ℓ	8,800

N/10-Hydrochloric Acid (Ethanol Solution) (0.1M) Normal

N/10(Ethanol Solution)(0.1M) 염산

Appearance ····· To pass test
Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1119	500㎖	Call

N/10-Hydrochloric Acid (2-Propanol Solution) (0.1M) Normal

N/102-Propanol Solution)(0.1M) 염산

Appearance ····· To pass test
Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1120	500㎖	Call

N/5 - Hydrochloric Acid (0.2M) Normal

N/5(0.2M) 염산

Appearance ····· To pass test
Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1117	500㎖	6,000

N/2 - Hydrochloric Acid (0.5M) Normal

N/2(0.5M) 염산

Appearance ····· To pass test
Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1139	500㎖	5,000
4190	1ℓ	8,800

Hydrofluoric acid

플루오르화수소(불산)
- CAS No. 7664-39-3
- HF • FW 20.01

- Spec. density 1.13 g/cm³(20℃) • Solub.in H_2O (20℃) soluble • pH value (20℃) strongly acid • Melting point −44℃ • Boiling point ~112℃

- IMDG UN 1790 HYDROFLUORIC ACID NOT MORETHAN 60%, 8(6.1), II
- HS Code 2811 11 00

Hydrofluoric acid Extra Pure

Appearance ····· Colorless liquid.
Assay (as HF) ····· 49.0 ~ 51.0%
Fluorosilicic Acid (H_2SiF_6) ····· Max 0.01%
Residue after ignition ····· Max 5ppm
Chloride (Cl) ····· Max 0.001%
Phosphate (PO_4) ····· Max 1ppm
Sulfate(SO_4) ····· Max 5ppm
Iron (Fe) ····· Max 0.5ppm
Lead (Pb) ····· Max 0.5ppm

Product No.	Packing	Price(₩)
3507	1kg	15,000

Hydrofluoric acid EL

Assay (as HF) ····· 49.0 ~ 51.0%
Color ····· Max 10APHA
Residue after ignition ····· Max 5ppm
Fluorosilicic Acid (H_2SiF_6) ····· Max 0.01%
Chloride (Cl) ····· Max 5ppm
Nitrate (NO_3) ····· Max 3ppm
Phosphate (PO_4) ····· Max 1ppm
Sulfate(SO_4) ····· Max 5ppm
Aluminum (Al) ····· Max 50ppb
Arsenic (As) ····· Max 30ppb
Boron (B) ····· Max 50ppb
Calcium (Ca) ····· Max 300ppb
Chromium (Cr) ····· Max 10ppb
Copper (Cu) ····· Max 50ppb
Gold (Au) ····· Max 300ppb
Iron (Fe) ····· Max 200ppb
Lead (Pb) ····· Max 100ppb
Magnesium (Mg) ····· Max 200ppb
Manganese (Mn) ····· Max 200ppb
Nickel (Ni) ····· Max 100ppb
Potassium (K) ····· Max 300ppb
Sodium (Na) ····· Max 300ppb
Tin(Sn) ····· Max 300ppb
Titanium(Ti) ····· Max 300ppb
Zinc (Zn) ····· Max 300ppb
Particle Count (0.5 micron and above) ····· Max 100pcs/ml

Product No.	Packing	Price(₩)
2070	3.8ℓ	42,500
1143	220kg	662,500

H

Hydrogen Peroxide 30%

과산화수소
● CAS No. 7722-84-1 ● EC No. 231-765-0
● H_2O_2 ● FW 34.01

● Vapour pressure ~20hPa(44℃) ● Spec. density 1.13 g/cm³(20℃) ● Solub.in H_2O (20℃) soluble ● pH value ~2-4(20℃) ● Melting point ~-24℃ ● Boiling point ~110℃

● IMDG UN 2014 HYDROGEN PEROXIDE ,AQUEOUS SOLUTION, 5.1(8), II
● HS Code 2847 00 00

Hydrogen Peroxide EL

Assay (as H_2O_2)	30.0 ~ 32.0%
Color	Max 10APHA
Free acid (as H_2SO_4)	Max 15ppm
Residue after evaporation	Max 10ppm
Chloride (Cl)	Max 0.5ppm
Nitrate (NO_3)	Max 2ppm
Phosphate (PO_4)	Max 2ppm
Sulfate(SO_4)	Max 0.3ppm
Aluminum (Al)	Max 100ppb
Arsenic (As)	Max 100ppb
Barium (Ba)	Max 50ppb
Boron (B)	Max 100ppb
Cadmium (Cd)	Max 100ppb
Calcium (Ca)	Max 100ppb
Chromium (Cr)	Max 20ppb
Cobalt (Co)	Max 100ppb
Copper (Cu)	Max 10ppb
Gallium (Ga)	Max 50ppb
Germanium (Ge)	Max 100ppb
Iron (Fe)	Max 100ppb
Lead (Pb)	Max 100ppb
Lithium (Li)	Max 20ppb
Magnesium (Mg)	Max 100ppb
Manganese (Mn)	Max 100ppb
Nickel (Ni)	Max 20ppb
Potassium (K)	Max 100ppb
Silicon (Si)	Max 100ppb
Silver (Ag)	Max 100ppb
Sodium (Na)	Max 200ppb
Strontium(Sr)	Max 100ppb
Tin(Sn)	Max 100ppb
Zinc (Zn)	Max 100ppb
Particle Count (0.5 micron and above)	Max 100pcs/ml

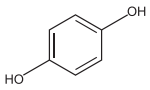
Product No.	Packing	Price(₩)
2072	3.8ℓ	11,300
1149	20kg	45,000
2983	220kg	Call

Hydrogen Peroxide Extra Pure

Appearance	Colorless liquid.
Assay	Min 28.0%
Residue after evaporation	Max 0.07%
Acidity(as H_2SO_4)	Max 0.05%
Chloride (Cl)	Max 0.001%
Phosphate (PO_4)	Max 5ppm
Sulfate (SO_4)	Max 0.05%
Lead (Pb)	Max 1ppm
Iron (Fe)	Max 1ppm

Product No.	Packing	Price(₩)
1145	500g	3,100
3059	1kg	6,300
1147	20kg	43,100

Hydroquinone Extra Pure



하이드로퀴논, 1,4-Benzenediol, 1,4-Dihydroxybenzene
● CAS No. 123-31-9 ● EC No. 204-617-8
● $C_6H_6O_2$ ● FW 110.11

● Vapour pressure <0.1hPa(25℃) ● Spec. density 1.358 g/cm³(20℃) ● Flash point 165℃c.c. ● Solub. in H_2O 70g/l (25℃) ● pH value 3.75(70g/l H_2O 20℃) ● Melting point -154℃ ● Bulk density ~600kg/m³ ● Boiling point 287℃(1013hPa) ● Ignition temp. 515℃

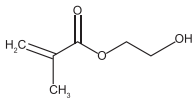
● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (HYDROQUINONE), 9, III
● HS Code 2097 22 00 ● RTECS MX3500000 ● Merck Index 10, 4719

Appearance	As colorless crystals in the air is gradually colored.
Assay	Min 99.0%
Solubility in CH_3COOH	To pass test
Melting point	171 ~ 174℃
Ignition residue (as Sulfate)	Max 0.05%
Total Chlorine	Max 0.005%
Sulfate (SO_4)	Max 0.05%
Lead (Pb)	Max 0.003%
Iron (Fe)	Max 0.003%

Product No.	Packing	Price(₩)
2079	500g	17,500

2-Hydroxy benzoic acid → *go to Salicylic Acid*

2-Hydroxy Ethylmethacrylate Extra Pure



메타아크릴산 2-히드록시에틸, Glycolmethacrylate
2-Hydroxyethyl, 2-methylpropenoate
● CAS No. 868-77-9 ● EC No. 212-782-2
● $H_2C=C(CH_3)COOCH_2CH_2OH$ ● FW 130.14

● Vapour pressure 1.3hPa(25℃) ● Spec. density 1.07 g/cm³(20℃) ● Flash point 101℃(DIN51758) ● Solub.in H_2O (20℃)miscible ● Melting point -60℃ ● Boiling point 250℃

● IMDG No Dangerous Good
● HS Code 2916 14 90 ● RTECS OZ4725000
● 4류 제3석유류 (수용성 액체) 4000ℓ

Product No.	Packing	Price(₩)
795	500g	11,800

4-Hydroxy-3-methoxybenzaldehyde → *go to Vanillin*

Hydroxyacetic acid → *go to Glycolic Acid*

o-Hydroxyaniline → *go to 2-Aminophenol*

2-Hydroxyethyl ether → *go to Diethylene Glycol*

Hydroxyl ammonium chloride
→ *go to Hydroxylamine Hydrochloride*

Hydroxylamine Hydrochloride — Extra Pure

염산하이드록시아민, Hydroxylammonium Chloride
● CAS No. 5470-11-1 ● EC No. 266-798-2
● ClH_4NO ● FW 69.49

● Spec. density 1.67 g/cm³(20℃) ● Solub.in H_2O 830g/l(20℃) ● pH value 2.5~3.5(50g/l, H_2O, 20℃) ● Melting point 159℃ ● Bulk density ~900kg/m³

● IMDG UN 2923 CORROSIVE SOLID, TOXIC, N.O.S. (HYDROXYLAMINE CHLORIDE), 8(6.1), III
● HS Code 2825 10 00 ● RTECS NC3675000 ● Merck Index 10, 4740

Appearance ····· Colorless deliquescent crystal.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.1%
Sulfate (SO_4) ····· Max 0.01%
Lead (Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
1156	500g	16,500

Hydroxylamine Sulfate — Extra Pure

황산하이드록시아민, Hydroxylammonium sulfate
● CAS No. 10039-54-0 ● EC No. 233-118-8
● $(NH_3OH)_2SO_4$ ● FW 164.14

● Spec. density 1.88 g/cm³(20℃) ● Solub.in H_2O 587g/l(20℃) ● pH value 3.6(10g/l, H_2O, 20℃) ● Melting point 170℃(decomposition) ● Bulk density 1100kg/m³

● IMDG UN 2865 HYDROXYLAMINE SULPHATE, 8, III
● HS Code 2825 10 00 ● 5류 히드록실아민염류 100kg
● Merck Index 10, 4742

Appearance ····· White crystal. Soluble in water.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.1%
Chloride (Cl) ····· Max 0.002%
Heavy metals (as Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
1158	500g	12,000
2085	25kg	200,000

1-Hydroxynaphthalene → *go to 1-Naphthol*

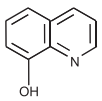
2-Hydroxynaphthalene → *go to 2-Naphthol*

2-Hydroxypropanoic acid → *go to Lactic acid*

3-Hydroxytoluene → *go to m-Cresol*

Hydroxytricarballylic acid → *go to Citric Acid anhydrous*

8-Hydroxyquinoline — Extra Pure NEW



8-하이드록시퀴놀린, 8-Quinolinol
● CAS No. 148-24-3 ● EC No. 205-711-1
● C_9H_7NO ● FW 145.16

● Solub.in H_2O 0.56 g/l (20 ℃) ● Melting point 72.5 – 74.0 ℃ ● Boiling point 267 ℃ (1013 hPa)

● IMDG NO Dangerous Good ● HS Code 2933 49 90
● Merck Index 10, 4765

Product No.	Packing	Price(₩)
5165	25g	10,500
5166	500g	82,500

Hypophosphorous Acid — Extra Pure / AR NEW

하이포아인산
● CAS No. 6303-21-5
● HPH_2O_2 ● FW 66.00

● IMDG UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III
● HS Code 2811 19 20

Product No.	Packing	Price(₩)
5167	1ℓ	52,500

H

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

I

Alphabetical list Numbers

List of I

Product	Page
Imidazole	161
2,2-Iminodiethanol	161
Indigo Carmine 0.1% solution	161
Indole-3-Butyric Acid	161
3-Indolebutyric acid	161
myo-Inositol	161
Iodine	161
N/10 Iodine	161
Iron Powder	162
Iron(II) sulfate heptahydrate	162
Iron(II) sulfide	162
Iron(II,III) Oxide black	162
Iron(III) chloride anhydrous	162
Iron(III) nitrate nonahydrate	162
Iron(III) oxide	162
Iso-Amyl Alcohol	162
Iso-Butyl Alcohol	162
L(+)-Isoleucine	162
Iso-Octane	163
Iso-Octanol	163
Isopropanol	163
Iso-Propyl Acetate	163
Iso-Propyl Alcohol	164
Iso-Propyl Ether	165
Itaconic Acid	165

Imidazole — Extra Pure

이미다졸, Glyoxaline

- CAS No. 288-32-4 • EC No. 206-019-2
- $C_3H_4N_2$ • FW 68.08

- Vapour pressure 0.003hPa(20℃) • Spec. density 1.030 g/cm³(20℃) • Flash point 145℃c.c.(DIN51758) • Solub.in 633g/l(20℃) • pH value 10.5(67g/l, H_2O, 20℃) • Melting point 89-90℃ • Bulk density 500-600kg/m³ • Boiling point 256℃ • Ignition temp. 480℃(DIN51794)

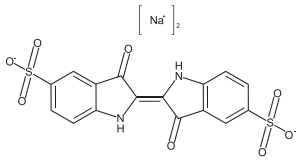
- IMDG UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (IMIDAZOLE), 8, III
- HS Code 2933 29 90 • RTECS NI3325000 • Merck Index 10, 4810

Solubility in water	To pass test
Water	Max 0.5%
pH(5%)	9.5 ~ 10.7
Ignition residue (as Sulfate)	Max 0.05%
Iron(Fe)	Max 0.001%
Assay	Min 99.0%

Product No.	Packing	Price(₩)
1168	25g	8,800

2,2-Iminodiethanol → *go to Diethanolamine*

Indigo Carmine 0.1% solution — Indicator solution



인디고 카민, Blue acid 74, CI 73015

- CAS No. 860-22-0 • EC No. 212-78-8
- $C_{16}H_8N_2Na_2O_8S_2$ • FW 466.36

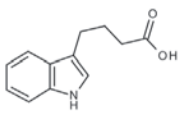
- Solub.in10g/l(25℃) • pHvalue~5.3(10g/l, H_2O, 20℃) • Bulkdensity~700-900kg/m³

- IMDG No Dangerous Good
- HS Code 3204 12 00 • RTECS UD3000000

Product No.	Packing	Price(₩)
3000	500㎖	11,400

NEW

Indole-3-Butyric Acid — Extra Pure



인돌-3-부티르산, 3-Indolebutyric acid

- CAS No. 133-32-4 • EC No. 205-101-5
- $C_{12}H_{13}NO_2$ • FW 203.24

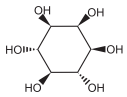
- Solub. in H_2O 0.25 g/l (20℃) • Melting point 121 – 126 ℃ • Bulk density ~ 360 kg/m³

- IMDG UN 2811 TOXIC SOLID, ORGANIC, N.O.S.(INDOLE-3-BUTYRIC ACID), 6.1, III
- HS Code 2933 99 80 • RTECS NL5250000

Product No.	Packing	Price(₩)
5168	25g	30,000

3-Indolebutyric acid → *go to Indole-3-Butyric Acid*

myo - Inositol



이노시톨, Myo-Inosit

- CAS No. 87-89-8 • EC No. 201-781-2
- $C_6H_{12}O_6$ • FW 180.16

- Solub.in 250g/l(20℃) • pH value 5-7(100g/l, H_2O, 20℃) • Melting point 224-227℃ • Bulk density ~500kg/m³

- IMDG No Dangerous Good
- HS Code 2906 13 90

myo-Inositol — Extra Pure

Product No.	Packing	Price(₩)
2089	25g	8,800

myo-Inositol — GR

Appearance	White crystal, weathering.
Melting point	223 ~ 227℃
Solubility in water	To pass test
Loss on drying (at.105℃,4hr.)	Max 0.5%
Ignition residue (as Sulfate)	Max 0.1%
Chloride (Cl)	Max 0.005%
Sulfate (SO_4)	Max 0.005%
Heavy Metals (as Pb)	Max 5ppm
Iron(Fe)	Max 5ppm
Substances reducing by fehling sol.	To pass test
Saccharose	To pass test

Product No.	Packing	Price(₩)
1171	25g	5,600
1172	500g	52,000

Iodine — Extra Pure

아이오딘(요오드)

- CAS No. 7553-56-2 • EC No. 231-442-4
- I_2 • FW 253.81

- Vapour pressure 0.41hPa(25℃) • Spec. density 4.93 g/cm³(20℃) • Solub.in H_2O 0.3g/l (20℃) • pH value 5.4(saturated solution) • Melting point 144℃ • Bulk density ~2100kg/m³ • Boiling point 60℃(1013hPa)

- IMDG 3290 TOXIC SOLID, CORROSIVE, INORGANIC, N.O.S. (IODINE), 6.1(8), II
- HS Code 2801 20 00 • RTECS NC3675000 • Merck Index 10, 4881

Appearance	Dark purple plate, granular or granular cystal. Metallic luster.
Assay	Min 99.0%
Non – volatile matter	Max 0.02%
Chlorine & Bromine	Max 0.005%
Sulfate (SO_4)	Max 0.02%

Product No.	Packing	Price(₩)
1176	25g	7,500
1177	500g	77,500

N/10 - Iodine (0.05M) — Normal

N/10(0.05M) 아이오딘

Factor	1.000~1.005

Product No.	Packing	Price(₩)
1173	500㎖	15,000
3847	1 ℓ	26,000

I

Iron Powder CP

철분
● CAS No. 7439-89-6 ● EC No. 231-096-4
● Fe ● FW 55.85

● Spec. density 7.87 g/cm³(20℃) ● Solub.in H_2O (20℃) insoluble ● Melting point 1535℃ ● Bulk density ~2600kg/m³ ● Boiling point 2730℃ ● Ignition temp. >100℃

● IMDG UN 3089 METALPOWDER, FLAMMABLE, N.A.G. (EISEN PULVER), 4.1, II
● HS Code 7205 29 00 ● Merck Index 10, 4942

Product No.	Packing	Price(₩)
1178	500g	5,000

Iron(II) sulfate heptahydrate → *go to Ferrous Sulfate heptahydrate*

Iron(II) sulfide → *go to Ferrous Sulfide*

Iron(II, III) Oxide black CP

사산화삼철, Triiron tetraoxide, Iron(II) diiron(III) Oxide
● CAS No. 1317-61-9 ● EC No. 231-096-4
● Fe_3O_4 ● FW 231.55

Product No.	Packing	Price(₩)
1183	500g	11,000

Iron(III) chloride anhydrous → *go to Ferric Chloride anhydrous*

Iron(III) nitrate nonahydrate → *go to Ferric Nitrate nonahydrate*

Iron(III) oxide → *go to Ferric Oxide red*

Iso-Amyl Alcohol

아이소아밀알콜, 3-Methyl-1-Butanol, Iso-Pentyl Alcohol
● CAS No. 123-51-3 ● EC No. 204-633-5
● $(CH_3)_2CHCH_2CH_2OH$ ● FW 88.15

● Vapour pressure 2mm Hg (20℃) ● Spec. density 0.809 (25℃) ● Flash point 43℃
● Melting point -117℃ ● Boiling point 130℃

Iso-Amyl Alcohol Extra Pure

Appearance ····· Clear-colorless liquid, Unusual odor.
Assay (by GC) ····· Min 98.0%
Density (20℃) ····· 0.808~0.813 g/ml
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.003%
Acidity (as CH_3COOH) ····· Max 0.1%
Aldehyde ····· To pass test
Substances not precipitated by H_2SO_4 ····· To pass test

Product No.	Packing	Price(₩)
797	500㎖	11,300
1813	1ℓ	17,000

Iso-Amyl Alcohol GR

Appearance ····· Clear-colorless liquid, Unusual odor.
Assay (by GC) ····· Min 98.0%
Density (20℃) ····· 0.808~0.813 g/ml
Refractive index (at 20℃) ····· 1.402 ~ 1.407
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.002%
Acidity (as CH_3COOH) ····· Max 0.1%
Aldehyde ····· To pass test
Alkality (as N) ····· Max 0.001%
Substances not precipitated by H_2SO_4 ····· To pass test

Product No.	Packing	Price(₩)
3840	2.5ℓ	56,300

Iso-Butyl Alcohol Extra Pure

아이소뷰틸알콜, 2-Methyl-1-Propanol
● CAS No. 78-83-1
● $(CH_3)_2CHCH_2OH$ ● FW 74.12

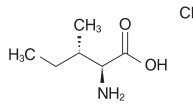
● Spec. density 0.802 g/cm³ (20℃) ● Boiling point 108℃

● IMDG UN 1212 ISOBUTANOL, 3, III
● HS Code 7205 29 00 ● Merck Index 10, 4942

Appearance ····· Colorless liquid, Unusual smell.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Density (20℃) ····· 0.800~0.804 g/ml
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.004%
Acidity (as CH_3COOH) ····· Max 0.004%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
1052	500㎖	5,000
1053	1ℓ	8,800
1054	18ℓ	72,500

L(+)-Isoleucine GR NEW



Chiral

● CAS No. 73-32-5 ● EC No. 200-798-2
● $CH_3CH_2CH(CH_3)CH(NH_2)COOH$ ● FW 131.17

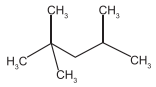
● Solub. in H_2O 40 g/l (20℃) ● pH value ~ 5.5 – 6.5 (40 g/l, H_2O, 20 ℃) ● Melting point 279 – 280 ℃ (decomposition) ● Bulk density ~ 470 kg/m³

● IMDG NO Dangerous Good ● HS Code 2922 49 85
● RTECS NR4705000

Appearance ····· White powder.
Assay ····· Min 99.0%
Heavy metals (as Pb) ····· Max 20ppm
Ammonium (NH_4) ····· Max 0.01%
Foreign amino acid ····· Max 0.5%

Product No.	Packing	Price(₩)
4685	25g	23,800

Iso-Octane



아이소옥테인, 2,2,4-Trimethylpentane
● CAS No. 540-84-1 ● EC No. 208-759-1
● $(CH_3)_2CHCH_2C(CH_3)_3$ ● FW 114.23

● Vapour pressure 51hPa(20℃) ● Spec. density 0.69g/cm³(20℃) ● Explosive limit 1-6Vol% ● Flash point -12℃ c.c. ● Solub.in H_2O 0.56g/l(25℃) ● Saturation conc. 239g/m³(20℃) ● Melting point -107℃ ● Boiling point 99℃(1013hPa) ● Ignition temp. 410℃

● IMDG UN 1262 OCTANES, 3, II
● HS Code 2901 10 00 ● Merck Index 10, 5040

Iso-Octane GR

Appearance ····· Colorless liquid. Petrol smell.
Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 0.686 ~ 0.694g/ml
Refractive index (n 20 D) ····· 1.390 ~ 1.393
Residue after evaporation ····· Max 0.001%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
1184	1 ℓ	27,000
4339	2.5 ℓ	50,000
1185	18 ℓ	350,000

Iso-Octane HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum Absorbance
205 nm ····· Max 1.00
225 nm ····· Max 0.10
254 nm ····· Max 0.014
UV Cutoff ····· Max 205nm
Assay (by GC) ····· Min 99.0%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 4ppm
Water Soluble Titratable Acid ····· Max 0.0003mEq/g
Sulfur Compounds (as S) ····· Max 0.005%

Product No.	Packing	Price(₩)
1186	4 ℓ	112,500

Iso-Octane PESTICIDE

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10ppt
Assay (by GC) ····· Min 99.0%
Color (APHA) ····· Max 10
Water ····· Max 0.01%
Residue after Evaporation ····· Max 5ppm

Product No.	Packing	Price(₩)
1187	4 ℓ	131,300

Iso-Octane Ultimate

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10ppt
FID Detectable residue (as 2-Octanol) ····· Max 5ppb
Ultraviolet Spectrophotometry
Maximum Absorbance
205 nm ····· Max 1.00
225 nm ····· Max 0.10
254 nm ····· Max 0.014
UV Cutoff ····· Max 205nm
Assay (by GC) ····· Max 99.8%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 1ppm
Fluorescecce Background ····· To pass test
Water soluble titrable acid ····· Max 0.0003mEq/g
Sulfur compounds (as S) ····· Max 0.005

Product No.	Packing	Price(₩)
1188	4 ℓ	137,500

Iso-Octanol Extra Pure

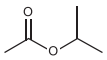
아이소옥타놀, 2-Ethyl-1-Hexanol
● CAS No. 104-76-7
● $CH_3(CH_2)_3CH(C_2H_5)CH_2OH$ ● FW 130.23

Appearance ····· Clear liquid.
Assay (by GC) ····· Min 98.0%
Density (20℃) ····· 0.820 ~ 0.833 g/ml
Refractive index (at 20℃) ····· 1.428 ~ 1.431
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.01%
Acid value ····· Max 0.1%

Product No.	Packing	Price(₩)
1554	500㎖	7,000
1555	1 ℓ	11,400
4763	4 ℓ	35,000
1556	18 ℓ	93,800

Isopropanol → *go to Iso-Propyl Alcohol*

Iso-Propyl Acetate Extra Pure



아세트산아이소프로필, Acetic acid isopropyl ester
● CAS No. 108-21-4 ● EC No. 203-561-1
● $CH_3COOCH(CH_3)_2$ ● FW 102.13

● Vapour pressure 61hPa (20℃) ● Spec. density 0.87g/cm³(20℃) ● Explosive limit 1.8 – 8Vol% ● Flash point 4℃ c.c. (DIN 51798) ● Solub. in H_2O 31g/l (20℃) ● Saturation conc. 256g/m³ (20℃) ● Melting point -73℃ ● Boiling point 88 – 90℃ ● Ignition temp. 460℃ (DIN 51794)

● IMDG UN 1220 ISOPROPYL ACETATE, 3, II ● HS Code 2915 39 10
● RTECS AI4930000 ● 4류 제1석유류(비수용성액체) 200ℓ ● Merck Index 10, 5054

Appearance ····· Colorless liquid. Smells fruity.
Assay ····· Min 99.0%
Density (20℃) ····· 0.869 ~ 0.874g/ml
Water ····· Max. 0.5%
Non-volatile matter ····· Max 0.005%
Acid(CH_3COOH) ····· Max 0.05%
Substances darkened by H_2SO_4 ····· To pass test

Product No.	Packing	Price(₩)
869	1 ℓ	11,500

I

Iso-Propyl Alcohol

2-프로판올, 2-Propanol, Isopropanol
● CAS No. 67-63-0 ● EC No. 200-661-7
● $(CH_3)_2CHOH$ ● FW 60.10

● Vapour pressure 43hPa (20℃) ● Spec. density 0.786 g/cm³ (20℃) ● Explosive limit 2 – 12.7 Vol% ● Flash point 12℃ c.c. ● Solub. in H_2O (20℃) soluble ● pH value (20℃)neutral ● Saturation conc. 105g/m³ (20℃) ● Melting point −89.5℃ ● Boiling point 82.4℃ (1013hPa) ● Ignition temp. 425℃ (DIN 51794)

● IMDG UN 1219 ISOPROPANOL, 3, II ● HS Code 2905 12 00
● RTECS NT8050000 ● 4류 알코올류 400ℓ ● Merck Index 10, 5057

Iso-Propyl Alcohol ELH

Assay (by GC)	Min 99.9%
Color	Max 10APHA
Alkalinity	Max 10ppm
Acidity	Max 10ppm
Water	Max 0.05%
Residue after evaporation	Max 5ppm
Chloride (Cl)	Max 0.05ppm
Phosphate (PO_4)	Max 0.05ppm
Aluminum (Al)	Max 5ppb
Arsenic (As)	Max 1ppb
Barium (Ba)	Max 1ppb
Cadmium (Cd)	Max 1ppm
Calcium (Ca)	Max 5ppb
Chromium (Cr)	Max 1ppb
Cobalt (Co)	Max 1ppb
Copper (Cu)	Max 3ppb
Iron (Fe)	Max 5ppb
Lead (Pb)	Max 1ppb
Lithium (Li)	Max 1ppb
Magnesium (Mg)	Max 1ppb
Manganese (Mn)	Max 1ppb
Nickel (Ni)	Max 3ppb
Potassium (K)	Max 5ppb
Silver (Ag)	Max 1ppb
Sodium (Na)	Max 20ppb
Strontium(Sr)	Max 1ppb
Zinc (Zn)	Max 1ppb
Particle Count (0.5 micron and above)	Max 30pcs/ml

Product No.	Packing	Price(₩)
865	3.8ℓ	15,000
866	20ℓ	75,000

Iso-Propyl Alcohol Extra Pure

Appearance	Clear, Characteristic odor.
Assay (by GC)	Min 99.5%
Solubility in water	To pass test
Density (20℃)	0.782 ~ 0.795g/ml
Water	Max 0.2%
Residue after evaporation	Max 0.004%
Acidity(as C_2H_5COOH)	Max 0.004%
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
857	500mℓ	4,400
858	1ℓ	6,900
856	18ℓ	53,800
2378	200ℓ	Call

Iso-Propyl Alcohol GR

Appearance	Clear, Characteristic odor.
Assay	Min 99.5%
Solubility in water	To pass test
Density (20℃)	0.784 ~ 0.787g/ml
Refractive index (n 20 D)	1.376 ~ 1.379
Water	Max 0.2%
Residue after evaporation	Max 0.001%
Acidity(as C_2H_5COOH)	Max 0.002%
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
855	1ℓ	8,800
4614	2.5ℓ	12,500
3462	3.8ℓ	21,300
1189	18ℓ	62,500

Iso-Propyl Alcohol HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance

205 nm	Max 1.00
220 nm	Max 0.25
230 nm	Max 0.13
254 nm	Max 0.02
UV cutoff	Max 205nm
Assay (by GC)	Min 99.9%
Color (APHA)	Max 10
Water	Max 0.05%
Residue after evaporation	Max 2ppm
Titratable acid or base	Max 0.0001mEq/g
Carbonyl Compounds (as propionaldehyde or acetone)	Max 0.002%
Solubility in water	To pass test

Product No.	Packing	Price(₩)
859	4ℓ	31,300

Iso-Propyl Alcohol KP

성상	무색의 맑은 액으로 특이한 냄새가 있다.
확인시험	이 약 1ml에 요오드시액2ml 및 수산화나트륨시액 2ml 넣어 섞었을 때 엷은 황색 침전이 생긴다. 이 약 5ml에 중크롬산시액 및 황산 5ml넣어 수욕에서 가열시 아세톤 냄새.
비중 d 20/20	0.785 ~ 0.788
굴절률 (n 20 D)	1.376~1.378
순도시험	
용해상태	이약 2ml에 물 8ml를 넣어 흔들었을때 액은 맑다.
산 (페놀프탈레인)	0.01mol/L-수산화나트륨액 0.4ml에적색
증발잔류물 (20ml, 105℃, 1hr)	1.0mg이하
수분 (W/V)	0.75이하 %
증류시험(81 ~ 83℃)	94.0이상 Vol %

Product No.	Packing	Price(₩)
863	18ℓ	52,500
864	200ℓ	Call

Iso-Propyl Alcohol PESTICIDE

Extraction-Concentration Suitability

ECD Detectable residue (as Heptachlor epoxide)	Max 10ppt
Assay (by GC)	Min 99.7%
Color (APHA)	Max 10
Water	Max 0.1%
Residue after Evaporation	Max 5ppm

Product No.	Packing	Price(₩)
861	4ℓ	35,000

Iso-Propyl Alcohol Ultimate

Extraction-Concentration Suitability

ECD Detectable residue (as Heptachlor epoxide)	Max 10ppt
FID Detectable residue (as 2-Octanol)	Max 5ppb

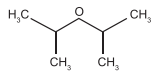
Ultraviolet Spectrophotometry
Maximum Absorbance

205 nm	Max 1.00

220 nm ····· Max 0.25
230 nm ····· Max 0.13
254 nm ····· Max 0.02
UV Cutoff ····· Max 205nm
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.05%
Residue after evaporation ····· Max 1ppm
Fluorescecce Background ····· To pass test
Titrable acid or base ····· Max 0.0001mEq/g
Solubility in Water ····· To pass test

Product No.	Packing	Price(₩)
2377	4 ℓ	37,500

Iso-Propyl Ether — Extra Pure



아이소프로필에테르, Diisopropyl ether
● CAS No. 108-20-3 ● EC No. 203-560-6
● $[(CH_3)_2CH]_2O$ ● FW 102.18

● Vapour pressure 175hPa (20℃) ● Spec. density 0.72 g/cm³ (20℃) ● Explosive limit 1.0 – 21 Vol% ● Flash point –28℃ (DIN 51755) ● Solub. in 12g/l H_2O (20℃) ● pH value (20℃)neutral ● Saturation conc. 751g/m³ (20℃) ● Melting point –86℃ ● Boiling point 67 – 70℃ (1013hPa) ● Water absorption 60g/kg (20℃) ● Ignition temp. 405℃ (DIN 51794)

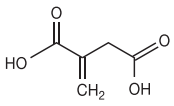
● IMDG UN 1159 DIISOPROPYL ETHER, 3, III ● HS Code 2909 19 00
● RTECS TZ5425000 ● 4류 제1석유류(비수용성 액체) 200ℓ ● Merck Index 10, 5061

Appearance ····· Clear, Colorless liquid.
Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 0.721 ~ 0.731g/ml
Refractive index (n 20 D) ····· 1.366 ~ 1.371
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.02%
Acidity (as CH_3CH_2COOH) ····· Max 0.01%
Peroxide (as H_2O_2) ····· Max 0.001%

Product No.	Packing	Price(₩)
1191	500㎖	8,800
1192	18 ℓ	120,000

NEW

Itaconic Acid — Extra Pure



이타콘산, Methylenesuccinic acid
● CAS No. 97-65-4 ● EC No. 202-599-6
● $C_5H_6O_4$ ● FW 130.1

● Spec. density 1.632 g/cm³ (20 ℃) ● Solub. in H_2O 83 g/l (20℃) ● pH value 2 (10 g/l, H_2O, 20 ℃) ● Melting point 162 – 167 ℃ ● Boiling point 268 ℃ (decomposition) ● Ignition temp. 430 ℃

● IMDG NO Dangerous Good ● HS Code 2917 19 90
● Merck Index 10, 5087

Appearance ····· White ~ Yellow crystalline powder.
Assay ····· Min 99.0%
Melting point ····· 164 ~ 167℃

Product No.	Packing	Price(₩)
4938	25g	4,400

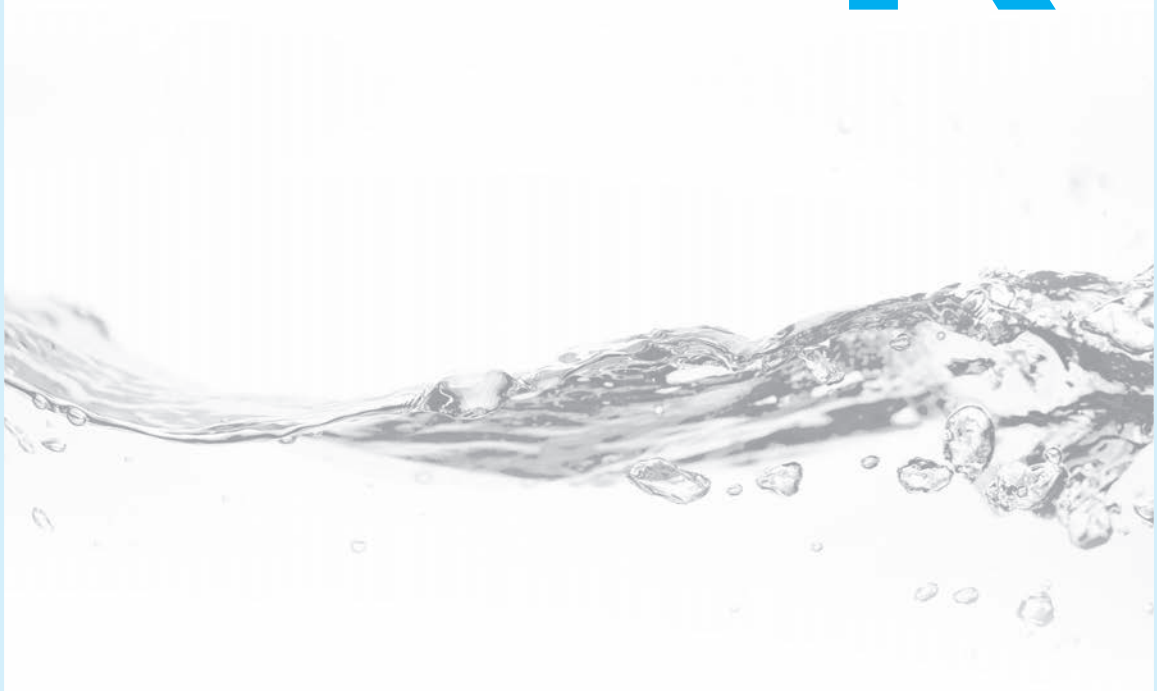
I

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

K



Alphabetical list Numbers

List of K

Product	Page
Kaoline	169
Karl–Fischer Reagent	169

Kaoline Extra Pure

카오린, Aluminium Silicate hydrated
● CAS No. 1332-58-7 ● EC No. 310-127-6

● Spec. density 2.6 g/cm³(20℃) ● Solub.in H_2O(20℃) insoluble ● pH value 6-7(50g/l, H_2O)(slurry) ● Bulk density ~350kg/m³

● IMDG No Dangerous Good
● HS Code 2507 00 20 ● RTECS GF1670500

Appearance ····· White, crumbly lumps or powder.
Acid soluble matter ····· Max 2.0%
Carbonate ····· To pass test
Heavy metals (as Pb) ····· Max 0.005%
Arsenic (As) ····· Max 2ppm
Iron (Fe) ····· Max 0.05%

Product No.	Packing	Price(₩)
662	500g	5,000

NEW

Karl-Fischer Reagent

AQUAZERO Composite 5

One component volumetric Karl-Fischer reagent for general samples
Pyridine free

● IMDG UN1760 CORROSIVE LIQUID, N.O.S., 8, Ⅲ

Titration media ····· **Dried Methanol**
Titer ····· **approx. 5mg water/ml**

Product No.	Packing	Price(₩)
5812	1ℓ	70,000

AQUAZERO Composite 2

One component volumetric Karl-Fischer reagent for general samples
Pyridine free

● IMDG UN1760 CORROSIVE LIQUID, N.O.S., 8, Ⅲ

Titration media ····· **Dried Methanol**
Titer ····· **approx. 2mg water/ml**

Product No.	Packing	Price(₩)
5811	1ℓ	Call

AQUAZERO Composite 5K

One component volumetric Karl-Fischer reagent for Aldehyde/Ketone samples
Pyridine free

● IMDG UN1760 CORROSIVE LIQUID, N.O.S., 8, Ⅲ

Titration media ····· **AQUAZERO Medium Keto**
Titer ····· **approx. 5mg water/ml**

Product No.	Packing	Price(₩)
5813	1ℓ	76,300

AQUAZERO KFR 5

One component volumetric Karl-Fischer reagent for general samples
with Pyridine

● IMDG UN1993 FLAMMABLE LIQUID, N.O.S. (Pyridine, 2-Methoxyethanol), 8, Ⅲ

Titration media ····· **Dried Methanol**
Titer ····· **approx. 5mg water/ml**

Product No.	Packing	Price(₩)
5810	1ℓ	62,500

AQUAZERO Medium Keto

Titration medium with Composite 5K

● IMDG UN3382 TOXIC BY INHALATION LIQUID, N.O.S. (2-Chloroethanol, Chloroform), 6.1, Ⅰ

Product No.	Packing	Price(₩)
5809	1ℓ	Call

AQUAZERO Methyl Alcohol-Dried

Titration medium with non-Ketone samples
Low water

● IMDG UN1230 METHANOL, 3(6.1), Ⅱ

Product No.	Packing	Price(₩)
5814	1ℓ	Call

K

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

L

Alphabetical list Numbers

List of L

Product	Page
Lacmoid	173
Lactic acid	173
Lactic acid calcium salt	173
Lactose monohydrate	173
Laevulose	173
Lanoline	173
Lanthanum Chloride heptahydrate	173
Lanthanum Nitrate hexahydrate	173
Lanthanum(III) nitrate hexahydrate	173
Lanthanum Oxide	173
Lanthanum(III) Oxide	173
Lauric acid	174
Lauryl Alcohol	174
Lead dichloride	174
Lead(II) Acetate trihydrate	174
Lead(II) Carbonate	174
Lead(II) Carbonate basic	174
Lead(II) Chloride	174
Lead(II) Chromate Precipitated	174
Lead(II) Nitrate	175
Lead(II) Octadecainoate	175
Lead(II) Oxide (Litharge)	175
Lead Powder	175
Lead(II, IV) Oxide, Red	175
Lead(II) Stearate	175
Lecithin	175
L-Leucine	175
Light Green for Microscopy	175
LIME	175
Linseed oil	176
Lithium Carbonate	176
Lithium Chloride anhydrous	176
Lithium Hydroxide monohydrate	176
Lithium Metal, Coated	176
Litmus Granular	176
L-Lysine monohydrochloride	176

Lacmoid — Indicator

락모이드
- CAS No. 42249-61-6
- $C_{18}H_{15}NO_8$ • FW 373.32

Product No.	Packing	Price(₩)
1194	25g	72,000

Lactic acid — Extra Pure

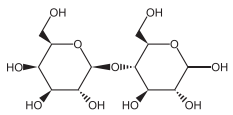
젖산, 2-Hydroxypropanoic Acid
- CAS No. 50-21-5
- $CH_3CH(OH)COOH$ • FW 90.08

Appearance ····· Colorless ~ pale yellowish sticky liquid.
Total lactic acid (as $CH_3CH(OH)COOH$) ····· 85.0 ~ 92.0%
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.05%
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%
Cyanide ····· To pass test
Aldehyde ····· To pass test

Product No.	Packing	Price(₩)
1163	500g	11,500

Lactic acid calcium salt → *go to Calcium Lactate*

Lactose monohydrate — GR



유당
- CAS No. 5989-81-1
- EC No. 200-559-2
- $C_{12}H_{22}O_{11}$ • FW 360.32

• Solub.in H_2O 161g/l(20℃) • pH value 4.0-6.5(100g/l, H_2O, 20℃) • Melting point 202℃ • Boiling point ~500Kg/m³ • Ignition temp. 390℃

- IMDG No Dangerous Good
- HS Code 1702 11 00 • RTECS OD9625000

Appearance ····· White crystalline powder. Some of the sweetness.
Solubility in water ····· To pass test
Solubility in dil. Ethanol ····· 0.2%
Specific rotation (α) 20 D ····· +52.2 ~ +52.8
Loss on drying (at. 80℃, 3hr) ····· Max 0.5%
Ignition residue (as Sulfate) ····· Max 0.05%
pH (5 w/v %, 25℃) ····· 4.0 ~ 6.0
Total Nitrogen (as N) ····· Max 0.005%
Heavy Metals (as Pb) ····· Max 5ppm
Iron(Fe) ····· Max 5ppm
Dextrine and starch ····· To pass test

Product No.	Packing	Price(₩)
1195	500g	8,800

Laevulose → *go to D-Fructose*

Lanoline — CP

라놀린
- CAS No. 8006-54-0

Appearance ····· Yellow is a semi-solid state.
Acid value ····· Max 1.0
Iodine value ····· 18.0 ~ 36.0
Neutrality (as pH) ····· To pass test
Water-soluble oxidizable substances ····· To pass test
Ammonia ····· To pass test

Product No.	Packing	Price(₩)
1198	500g	22,500

Lanthanum Chloride heptahydrate — GR NEW

염화란타늄 7수화물
- CAS No. 10025-84-0 • EC No. 233-237-5
- $Cl_3La \cdot 7\ H_2O$ • FW 371.37

• Solub. in H_2O (20℃) soluble • pH value 5 (100 g/l, H_2O, 25 ℃) • Melting point 91 ℃ (release of crystalline water) • Bulk density 900 kg/m³

- IMDG NO Dangerous Good • HS Code 2846 90 00
- Merck Index 10, 5193

Appearance ····· White crystalline powder.
Assay (after dride over H_2SO_4) ····· Min 99.0%
Insoluble matter ····· Max 0.01%
Calcium (Ca) ····· Max 0.001%
Magnesium (Mg) ····· Max 0.0001%

Product No.	Packing	Price(₩)
5071	25g	16,500

Lanthanum Nitrate hexahydrate — Extra Pure NEW

질산 란타늄 6수화물, Lanthanum(III) nitrate hexahydrate
- CAS No. 10277-43-7 • EC No. 233-238-0
- $La(NO_3)_3 \cdot 6\ H_2O$ • FW 433.02

• Solub. in H_2O 1580 g/l (25℃) • pH value ~ 3.4 (50 g/l, H_2O, 25 ℃) • Melting point 40 ℃ • Bulk density 1300 kg/m³ • Boiling point 126 ℃ (decomposition)

- IMDG UN 1477 NITRATES, INORGANIC, N.O.S., 5.1, II • HS Code 2846 90 00
- RTECS OE5250000 • Merck Index 10, 5193 • 1류 질산염류

Product No.	Packing	Price(₩)
5169	25g	12,500

Lanthanum(III) nitrate hexahydrate
→ *go to Lanthanum Nitrate hexahydrate*

Lanthanum Oxide — Extra Pure / AR NEW

산화란타늄, Lanthanum(III) Oxide
- CAS No. 1312-81-8 • EC No. 215-200-5
- La_2O_3 • FW 325.82

• Spec. density 6.51 g/cm³ (20 ℃) • pH value 9.0 (50 g/l, H_2O, 20 ℃)(slurry) • Melting point 2315 ℃ (decomposition) • Bulk density 1300 kg/m³ • Boiling point 4200 ℃

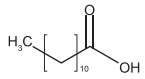
- IMDG NO Dangerous Good • HS Code 2846 90 90
- RTECS AY2990000

Product No.	Packing	Price(₩)
5170	25g	17,000

Lanthanum(III) Oxide → *go to Lanthanum Oxide*

L

Lauric acid — Extra Pure



라우르산, Dodecanoic acid
● CAS No. 143-07-7 ● EC No. 205-582-1
● $CH_3(CH_2)_{10}COOH$ ● FW 200.32

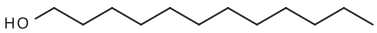
● Vapour pressure 0.15hPa(100℃) ● Spec. density 0.883 g/cm³(50℃) ● Explosive limit 0.6Vol% ● Flash point 176℃c.c. ● Solub.in H_2O 0.058g/l(20℃) ● Melting point 43-45℃ ● Bulk density ~490kg/m³ ● Boiling point 299℃ ● Ignition temp.250℃

● IMDG No Dangerous Good
● HS Code 2915 90 10 ● RTECS OE9800000 ● Merck Index 10, 5216

Appearance ····· The white flakes, granules or lumps form. Colorless crystalline solid or liquid. Unusual smell.
Assay ····· Min 98.5%
Melting point ····· 32 ~ 45℃
Ignition residue (as Sulfate) ····· Max 0.1%
Acid value ····· 275 ~ 285
Iodine value ····· Max 1
Heavy Metals (as Pb) ····· Max 5ppm
Iron(Fe) ····· 2ppm

Product No.	Packing	Price(₩)
5659	500g	9,400

Lauryl Alcohol — Extra Pure



라우릴알코올, Dodecyl alcohol, 1-Dodecanol
● CAS No. 112-53-8 ● EC No. 203-982-0
● $CH_3(CH_2)_{11}OH$ ● FW 186.34

● Vapour pressure <1hPa(20℃) ● Spec. density 0.83 g/cm³(20℃) ● Flash point ~199℃(DIN51758) ● Solub.in H_2O 0.004g/l(25℃) ● Melting point 21-24℃ ● Boiling point 258-265℃ ● Ignition temp. ~255℃(DIN51794)

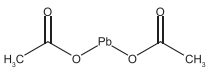
● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (1-DODECANOL), 9, III
● HS Code 2905 17 00 ● RTECS JR5775000 ● Merck Index 10, 3413

Appearance ····· White crystalline or lump or colorless liquid.
Freezing point ····· 19.0 ~ 25.0℃
Solubility in ethanol ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.05%
Acid value ····· Max 0.1
Saponification value ····· Max 2.0
Hydroxyl value ····· 292 ~ 302

Product No.	Packing	Price(₩)
1201	500㎖	6,300

Lead dichloride → *go to Lead(II) Chloride*

Lead(II) Acetate trihydrate — Extra Pure



아세트산납
● CAS No. 6080-56-4 ● EC No. 206-104-4
● $C_4H_6O_4Pb\ 3H_2O$ ● FW 379.34

● Spec. density 3.3g/cm³(20℃) ● Solub.in H_2O 443g/l(20℃) ● pH value 5.5-6.5(50g/l, H_2O, 20℃) ● Melting point 75℃ ● Bulk density ~1200kg/m³

● IMDG UN 1616 LEAD ACETATE, 6.1, III, Marine Pollutant: P
● HS Code 2915 29 00 ● RTECS OF8050000 ● Merck Index 10, 5228

Appearance ····· Colorless crystals or white crystalline globule.
Assay ····· Min 99.0%
Solubility in dil. Acetic acid ····· To pass test
Chloride (Cl) ····· Max 0.001%
Nitrate (NO3) ····· To pass test
Copper (Cu) ····· Max 0.002%
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
1203	500g	22,500
1204	1kg	37,500

Lead(II) Carbonate — GR / AR / ACS

NEW

Lead(II) Carbonate
● CAS No. 598-63-0
● $PbCO_3$ ● FW 267.21

Product No.	Packing	Price(₩)
5556	500g	Call

Lead(II) Carbonate basic

염기성 탄산납,
● CAS No. 1319-46-6
● $Pb(CO_3)_2Pb\cdot Pb(OH)_2$ ● FW 775.63

Lead(II) Carbonate basic — Extra Pure

Product No.	Packing	Price(₩)
5596	500g	Call

Lead(II) Carbonate basic — CP

Product No.	Packing	Price(₩)
1205	500g	24,000

Lead(II) Chloride

염화납, Lead dichloride
● CAS No. 7758-95-4 ● EC No. 231-845-5
● $PbCl_2$ ● FW 278.10

● Spec. density 5.85 g/cm³(20℃) ● Solub.in H_2O 10g/l(20℃) insoluble ● Melting point 500℃ ● Boiling point 950℃

● IMDG UN 2291 LEAD COMPOUND, SOLUBLE, N.O.S., 6.1, III, Marine Pollutant:P
● HS Code 2827 39 85

Lead(II) Chloride — Extra Pure

Product No.	Packing	Price(₩)
2118	25g	6,100

Lead(II) Chloride — CP

Product No.	Packing	Price(₩)
1207	500g	40,000

Lead(II) Chromate, Precipitated — Extra Pure

크롬산납, 침강제
● CAS No. 7758-97-6 ● EC No. 231-846-0
● $PbCrO_4$ ● FW 323.18

Product No.	Packing	Price(₩)
2120	500g	16,300

Lead(II) Nitrate — Extra Pure

질납산
- CAS No. 10099-74-8 • EC No. 233-245-9
- $Pb(NO_3)_2$ • FW 331.21

- Vapour pressure (20℃)low • Spec. density 4.53 g/cm³(20℃) • Solub.in H_2O 522g/l(20℃) • pH value 3-4(50g/l, H_2O, 20℃) • Melting point 470℃ (decomposition) • Bulk density ~1850kg/m³

- IMDG UN 1469 LEAD NITRATE, 5.1(6.1), II, Marine Pollutant:P
- HS Code 2834 29 20 • Merck Index 10, 5252
- 1류 질산염류 300kg

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.005%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
1210	500g	14,000
1211	1kg	21,000

Lead(II) Octadecainoate → *go to Lead(II) Stearate*

Lead(II) Oxide (Litharge) — Extra Pure

일산화납, Lead Monoxide
- CAS No. 1317-36-8 • EC No. 215-267-0
- PbO • FW 223.20

Product No.	Packing	Price(₩)
1209	500g	6,300

NEW

Lead Powder — Extra Pure

납가루
- CAS No. 7439-92-1 • EC No. 231-100-4
- Pb • FW 207.2

- Spec. density 11.3 g/cm³ (20 ℃) • Solub. in H_2O (20 ℃) almost insoluble • Melting point ~ 327 ℃ • Bulk density ~ 4500 kg/m³ • Boiling point 1740 ℃

- IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(LEAD), 9, III, Marine Pollutant: P, Segregation Group: 7 (Heavy metals and their salts (including their organometallic compounds)), 9 (Lead and its compounds) • Merck Index 10, 5227 • 2류 금속분 (150㎛의 체를 통과하는 것이 50중량% 미만인 것은 제외)

Product No.	Packing	Price(₩)
5171	500g	22,500

Lead(II, IV) Oxide, Red — Extra Pure

사산화납(광명단), Trilead tetraoxide
- CAS No. 1314-41-6
- Pb_3O_4 • FW 685.63

- Spec. density 9.1 g/cm³ • Melting point 800℃ (decompositopn)

Product No.	Packing	Price(₩)
1213	500g	9,000

Lead(II) Stearate

스테아린산납, Lead(II) Octadecanoate
- CAS No. 1072-35-1
- approx. $Pb[CH_3(CH_2)_{16}COO]_2$ • FW 744.15

Lead(II) Stearate — Extra Pure

Product No.	Packing	Price(₩)
5658	500g	Call

Lead(II) Stearate — CP

Product No.	Packing	Price(₩)
1212	500g	22,500

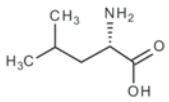
Lecithin — Extra Pure

렉시틴
- CAS No. 8002-43-5
- FW 677.92

Product No.	Packing	Price(₩)
2125	500g	9,000

NEW

L-Leucine — Extra Pure



Chiral

L-루신, L-2-Amino-4-methylpentanoic acid
- CAS No. 61-90-5 • EC No. 200-522-0
- $C_6H_{13}NO_2$ • FW 131.18

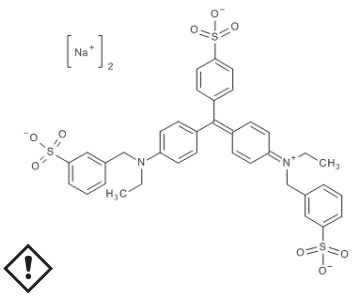
- Spec. density 1.293 g/cm³ (20 ℃) • Solub. in H_2O 24 g/l (20℃) • pH value 5.5 – 6.5 (20 g/l, H_2O, 20 ℃) • Melting point 300 ℃ (decomposition) • Bulk density ~ 300 – 400 kg/m³

- IMDG NO Dangerous Good • HS Code 2922 49 85
- RTECS OH2850000

Product No.	Packing	Price(₩)
5172	25g	9,400

NEW

Light Green for Microscopy — Extra Pure



L-루신, Acid Green 5
- CAS No. 5141-20-8
- EC No. 225-906-5
- $C_{37}H_{34}N_2Na_2O_9S_3$ • FW 792.86

- Solub. in H_2O 200 g/l (25 ℃) • pH value ~2.9 (10 g/l, H_2O, 25 ℃) • Bulk density ~ 200 kg/m³

- IMDG NO Dangerous Good
- HS Code 3204 19 00
- RTECS BQ4900000

Product No.	Packing	Price(₩)
5174	25g	40,000

LIME → *go to Calcium Hydroxide*

L

Linseed oil — Extra Pure

아마인유
● CAS No. 8001-26-1

● Spec. density 0.928g/cm³(20℃)

Appearance ····· Yellow ~ brown liquid from.
Density ····· 0.925 ~ 0.930g/ml
Refractive index (n 20 D) ····· 1.478 ~ 1.481
Acid value ····· Max 1.0
Iodine value ····· 175.0 ~ 195.0

Product No.	Packing	Price(₩)
1217	500㎖	7,000

Lithium Carbonate — Extra Pure

탄산리튬
● CAS No. 554-13-2 ● EC No. 209-062-5
● Li_2CO_3 ● FW 73.89

● Vapour pressure (20℃)low ● Spec. density 2.1 g/cm³(20℃) ● Solub.in H_2O 13g/l(20℃) ● pH value ~10-11(5g/l, H_2O, 20℃) ● Melting point 720℃ ● Bulk density ~250kg/m³

● IMDG No Dangerous Good
● HS Code 2836 91 00 ● RTECS OJ5800000 ● Merck Index 10, 5352

Appearance ····· White powder.
Assay (after dried) ····· Min 98.0%
Loss on drying ····· Max 1.0%
Chloride (Cl) ····· Max 0.03%
Sulfate (SO_4) ····· Max 0.2%
Heavy metals (as Pb) ····· Max 0.004%
Iron (Fe) ····· Max 0.005%
Magnesium (Mg) ····· Max 0.05%
Calcium (Ca) ····· Max 0.1%

Product No.	Packing	Price(₩)
1218	500g	16,500
2126	1kg	26,500

Lithium Chloride anhydrous — Extra Pure

염화리튬
● CAS No. 7447-41-8 ● EC No. 231-212-3
● LiCl ● FW 42.39

● Vapour pressure 1.33hPa(547℃)low ● Spec. density 2.07 g/cm³(20℃) ● Solub. in H_2O 832g/l(20℃) ● pH value ~6(50g/l, H_2O, 20℃) ● Melting point 614℃ ● Bulk density ~530kg/m³ ● Boiling point 1360℃

● IMDG No Dangerous Good
● HS Code 2827 39 85 ● RTECS OJ5950000 ● Merck Index 10, 5353

Appearance ····· White deliquescent crystals or lumps
Assay (after dried) ····· Min 98.0%
Solubility in water ····· To pass test
Loss on drying(at 130℃) ····· Max 2.0%
Alkalies(as LiOH) ····· Max 0.06%
Nitrate (NO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.1%
Phosphate (PO_4) ····· Max 0.003%
Ammonium (NH_4) ····· Max 0.005%
Heavy metals (as Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.003%
Calcium (Ca) ····· Max 0.05ppb
Potassium and Sodium ····· Max 0.5%

Product No.	Packing	Price(₩)
1219	500g	27,000

Lithium Hydroxide monohydrate — Extra Pure

수산화리튬
● CAS No. 1310-66-3
● $LiOH \cdot H_2O$ ● FW 41.96

Appearance ····· White powder or crystals are hygroscopic.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Carbonate (CO_3) ····· Max 0.3%
Sulfate (SO_4) ····· Max 0.1%
Sodium (Na) ····· Max 0.01%
Calcium (Ca) ····· Max 0.01%
Iron(Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
1220	500g	20,000

Lithium Metal, Coated — Extra Pure NEW

리튬메탈
● CAS No. 7439-93-2 ● EC No. 231-102-5
● Li ● FW 6.94

● Vapour pressure 1 hPa (723 ℃) ● Spec. density 0.5 g/cm³ (20 ℃) ● Solub. in H_2O (20℃)(decomposition) ● Melting point 179 ℃ ● Boiling point 1347 ℃

● IMDG UN 1415 LITHIUM, 4.3, I ● HS Code 2933 99 80
● Merck Index 10, 5343 ● 제3류 알칼리금속(칼륨 및 나트륨을 제외한다) 및 알칼리토금속

Product No.	Packing	Price(₩)
5175	25g	450,000

Litmus Granular — Indicator

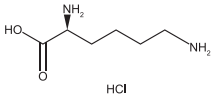
리트머스
● CAS No. 1193-92-6 ● EC No. 215-739-6

● Spec. density 60 g/ℓ (20℃) ● Solub.in H_2O 7.0 (10 g/ℓ, H_2O, 20℃) ● Bulk density 520 kg/m³

● IMDG No Dangerous Good ● HS Code 3203 00 10

Product No.	Packing	Price(₩)
1221	25g	18,000

L-Lysine monohydrochloride — GR



L-라이신염산염, L-(+)-2,6-Diamino-N-caproic acid monohydrochloride
● CAS No. 657-27-2 ● EC No. 211-519-9
● $H_2N(CH_2)_4CH(NH_2)COOH \cdot HCl$ ● FW 182.65

● Solub.in H_2O 420g/l(20℃) ● pH value 5.5-6.0(100g/l, H_2O, 20℃) ● Melting point ~263-264℃ ● Bulk density ~360kg/m³

● IMDG No Dangerous Good
● HS Code 2922 41 00 ● Merck Index 10, 5453

Product No.	Packing	Price(₩)
1223	25g	8,000

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

M

Alphabetical list Numbers

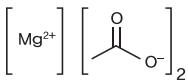
List of M

Product	Page
Magnesium Acetate tetrahydrate	180
Magnesium Carbonate basic light	180
Magnesium carbonate hydroxide, light	180
Magnesium Chloride hexahydrate	180
Magnesium Fluoride	180
Magnesium Hydroxide	180
Magnesium Nitrate hexahydrate	180
Magnesium octadecanoate	180
Magnesium Oxide heavy	181
Magnesium Oxide light	181
Magnesium powder	181
Magnesium Stearate	181
Magnesium sulfate anhydrous	181
Magnesium Sulfate heptahydrate	181
Magnesium turnings	182
Malachite Green Oxalate	182
Maleic Anhydride	182
DL–Malic acid	182
Maltose monohydrate	182
Manganese Dioxide	182
Manganese Sulfate monohydrate	182
Manganese Sulfate pentahydrate	183
Manganese(Ⅳ) oxide	183
Manganese(II) Carbonate	183
Manganese(II) Chloride tetrahydrate	183
Manganese(II) Nitrate hexahydrate	183
D–Mannitol	183
MEK	183
Melamine	184
L–Menthol	184
Mercuric Thiocyanate	184
Mercurous Chloride	184
Mercury	184
Mercury(II) Acetate	184
Mercury(I) Chloride	184
Mercury(II) Chloride	184
Mercury(II) Iodide Red	184
Mercury(II) Nitrate monohydrate	185
Mercury(II) Sulfate	185
Mercury(II) Thiocyanate	185
Mesyl chloride	185
meta–Phosphoric Acid	185
Metanil Yellow	185
Methacrylic acid	185
Methacrylic acid butyl ester	185
Methanesulfonic Acid	185
Methanesulfonyl Chloride	185
Methanoic acid	186
Methanol	186

Product	Page
DL–Methionine	186
L–Methionine	186
Methoxybenzene	186
2–Methoxyethanol	186
2–Methoxyethyl Ether	186
1–Methoxy–2–Propanol	186
1–Methoxy–2–Propyl Acetate	186
Methyl Acetate	187
Methyl acetic acid	187
Methyl Acetoacetate	187
Methyl Acrylate monomer	187
Methyl Alcohol	187
Methyl Alcohol–Dried	189
Methylamine Solution 40%	189
4–Methylaminophenol sulfate	189
Methylbenzene	189
3–Methyl–1–butanol	189
Methyl tert–Butyl Ether	189
Methyl cellosolve	190
Methyl Cellulose (4000cps)	190
Methylchloroform	190
Methyl cyanide	190
Methyl Cyclohexane	190
Methylene Blue trihydrate	190
Methylene Chloride	190
Methyl Ethyl Ketone	191
Methyl 4–hydroxy benzoate	192
Methyl Isobutyl Ketone	192
Methyl Methacrylate	192
Methyl–2–methylpropenoate	192
n–Methyl Morpholine	192
Methyl Orange	193
Methyl Orange Solution	193
Methyl Orange xylene cyanol Solution	193
Methyl 3–oxobutanoate	193
Methyl Paraben	193
2–Methyl–2,4–pentanediol	193
2–Methyl–1–Propanol	193
Methyl propenoate	193
2–Methylpropenoic acid	193
N–Methyl–2–Pyrrolidone	193
1–Methyl–2–pyrrolidone	194
Methyl Red	194
Methyl Red Solution	194
Methyl Salicylate	195
7–Methyltheobromine	195
Methyl Violet 2B	195
Methyl Violet 2B Soution	195
Methyl Yellow	195

Product	Page
Methyl Yellow Soution	195
Metol	195
MIBK	195
Molecular sieve 13X	195
Molecular sieve 3A	195
Molecular sieve 4A	195
Molecular sieve 4A 4×8	195
Molecular sieve 5A	195
Molybdenum Disulfide	196
Molybdenum(VI) Oxide	196
Molybdenum(IV) sulfide	196
Molybdenum trioxide	196
Molybdic Acid 85%	196
12 Molybdo(VI) phosphoric Acid n-Hydrate	196
Monochloroacetic Acid	196
Monochlorobenzene	196
Monoethanolamine	197
Mononitromethane	197
Morpholine	197
MTBE	197
Murexide	197
Myristic Acid	197

Magnesium Acetate tetrahydrate — Extra Pure



초산마그네슘 4수화물, Acetic acid magnesium salt
● CAS No. 16674-78-5 ● EC No. 205-554-9
● $(CH_3COO)_2\,Mg\cdot 4H_2O$ ● FW 214.46

● Spec. density 1.45 g/cm³ (20℃) ● Solub.in H_2O 1200 g/ℓ (15℃) ● pH value 6.1 (50 g/ℓ, H_2O, 20℃) ● Melting point 80℃ ● Bulk density 510 kg/m³

● IMDG No Dangerous Good ● HS Code 2915 29 00

Appearance ····· White crystalline powder.
Assay ····· Min 98.0%
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.01%
Barium (Ba) ····· Max 0.005%
Iron (Fe) ····· Max 0.005%
Heavy Metals (as Pb) ····· Max 0.002%

Product No.	Packing	Price(₩)
4030	500g	10,600
4029	1kg	19,500

Magnesium Carbonate, basic light — CP

탄산마그네슘, Magnesium Carbonate Hydroxide, Light
● CAS No. 39409-82-0
● $(MgCO_3)_4Mg(OH)_2\cdot 5H_2O$ ● FW 485.74

Appearance ····· White light powder. Containing carbonated water, Ammonium salts solution dissolves a little easier.
Assay(as MgO) ····· Min. 40.0%
Solubility in HCl ····· To pass test
Chloride (Cl) ····· Max. 0.05%

Product No.	Packing	Price(₩)
280	300g	12,000

Magnesium carbonate hydroxide, light
→ *go to Magnesium Carbonate basic light*

Magnesium Chloride hexahydrate — Extra Pure

염화마그네슘
● CAS No. 7791-18-6 ● EC No. 232-094-6
● $MgCl_2\cdot 6H_2O$ ● FW 203.30

● Spec. density ~1.57 g/cm³(20℃) ● Solub.in H_2O 1670g/l (20℃) ● pH value 4.5-7.0 (50g/l, H_2O, 20℃) ● Melting point ~117℃ (decomposition)

● IMDG No Dangerous Good
● HS Code 2827 31 00 ● RTECS OM2975000 ● Merck Index 10, 5480

Appearance ····· Colorless ~ white crystals, is deliquescent.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
pH (5 w/v %, 25℃) ····· 5.0 ~ 7.0
Sulfate (SO_4) ····· Max 0.005%
Calcium(Ca) ····· Max 0.03%
Barium (Ba) ····· Max 0.005%
Lead (Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%
Ammonium (NH_4) ····· Max 0.001%

Product No.	Packing	Price(₩)
282	500g	5,600
2142	1kg	10,000
2143	20kg	125,000

Magnesium Fluoride — CP

플르오르화마그네슘, Sellaite
● CAS No. 7783-40-6 ● EC No. 231-995-1
● MgF_2 ● FW 62.31

● Spec. density 3.13 g/cm³(20℃) ● Solub.in H_2O 0.087g/l(18℃) ● Melting point 1266℃ ● Bulk density ~500-700kg/m³ ● Boiling point 2260℃(1013hPa)

● IMDG No Dangerous Good
● HS Code 2826 19 90 ● RTECS OM3325000

Product No.	Packing	Price(₩)
292	500g	14,500

Magnesium Hydroxide — Extra Pure

수산화마그네슘
● CAS No. 1309-42-8 ● EC No. 215-170-3
● $Mg(OH)_2$ ● FW 58.32

● Spec. density 2.38 g/cm³(20℃) ● Solub.in H_2O 0.009g/l(18℃) ● pH value 9.5-10.5(aqueous suspension) ● Bulk density ~350-600kg/m³

● IMDG No Dangerous Good
● HS Code 2816 10 00 ● Merck Index 10, 5488

Appearance ····· A bulky white powder.
Assay (after dried) ····· Min 95.0%
Water soluble matter ····· Max 1.5%
Acid insoluble matter ····· Max 0.2
Loss on drying ····· Max 1.5%
Ignition loss ····· 30.0 ~ 33.0%
Carbonate (CO_3) ····· To pass test
Iron and Alimiuium ····· Max 0.3%
Calcium Oxide (CaO) ····· Max 1.0%

Product No.	Packing	Price(₩)
294	500g	5,600

Magnesium Nitrate hexahydrate — Extra Pure

질산마그네슘
● CAS No. 13446-18-9 ● EC No. 233-826-7
● $Mg(NO_3)_2\cdot 6H_2O$ ● FW 256.41

● Spec. density 1.46 g/cm³(20℃) ● Solub.in H_2O 420g/l(18℃) ● pH value 5.0-7.0(50g/l, H_2O, 25℃) ● Melting point 89℃(for the hexahydrate)

● IMDG UN 1474 MAGNESIUM NITRATE, 5.1, III
● HS Code 2834 29 80 ● Merck Index 10, 5492

Appearance ····· Colorless crystals, is deliquescent.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 5.0 ~ 7.0
Chloride (Cl) ····· Max 0.005%
Phosphate (PO_4) ····· Max 0.002%
Sulfate (SO_4) ····· Max 0.01%
Calcium(Ca) ····· Max 0.01%
Barium (Ba) ····· Max 0.005%
Lead (Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
298	500g	8,800
301	25kg	187,500

Magnesium octadecanoate → *go to Magnesium Stearate*

Magnesium Oxide, heavy — Extra Pure

산화마그네슘, 중질

● CAS No. 1309-48-4 ● EC No. 215-171-9
● MgO ● FW 40.30

● Spec. density 3.58 g/cm³(25℃) ● Solub.in H_2O (20℃) almost insoluble ● pH value 10.3(20℃)(saturated solution) ● Melting point 2800℃(1000hPa)

● IMDG No Dangerous Good
● HS Code 2519 90 10 ● RTECS OM3850000 ● Merck Index 10, 5495

Appearance	White powder.
Assay (after ignition)	Min 98.0%
Solubility in dil. HCl	To pass test
Insoluble matter	Max 1.0%
Ignition loss	Max 10.0%
Chloride (Cl)	Max 0.07%
Sulfate (SO_4)	Max 0.02%
Heavy metals (as Pb)	Max 0.02%
Calcium (Ca)	To pass test
Iron (Fe)	Max 0.03%

Product No.	Packing	Price(₩)
327	500g	8,800

Magnesium Oxide, light

Appearance	White powder.
Loss on ignition (800℃)	Max 10.0%
Assay (after ignition)	Min 95.0%

Magnesium Oxide, light — Extra Pure

Product No.	Packing	Price(₩)
324	500g	11,300

Magnesium Oxide, light — CP

Product No.	Packing	Price(₩)
2845	20kg	105,000

Magnesium, powder — Extra Pure

● CAS No. 7439-95-4 ● EC No. 231-104-6
● Mg ● FW 24.31

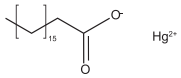
● Vapour pressure 0.00013hPa(325℃) ● Spec. density 1.74 g/cm³(20℃) ● Solub. in H_2O (20℃) (slow decomposition) ● Melting point 651℃ ● Boiling point 1107℃ ● Ignition temp. >450℃

● IMDG UN 1418 MAGNESIUM POWDER, 4.3(4.2), II
● HS Code 8104 30 00 ● RTECS FW6475100 ● Merck Index 10, 5469

Appearance	Silvery ~ gray powder.
Assay	Min 98.0%
Copper (Cu)	Max 0.03%
Iron (Fe)	Max 0.05%

Product No.	Packing	Price(₩)
1224	500g	25,000

Magnesium Stearate — Extra Pure



스테아린산마그네슘, Magnesium Octadecanoate
● CAS No. 557-04-0 ● EC No. 209-150-3
● $(C_{18}H_{35}CO_2)_2Mg$ ● FW 591.27

● pH value ~7(slurry) ● Melting point ~140℃ ● Bulk density ~250kg/m³

● IMDG No Dangerous Good
● HS Code 3824 90 98 ● RTECS WI4390000

Appearance	White powder.
Assay(as Mg)	4.0 ~ 5.0%
Loss on drying(at.105℃,3hr.)	Max 6.0%
Heavy metals (as Pb)	Max 0.002%
Free fatty acid	To pass test

Product No.	Packing	Price(₩)
331	500g	8,800

Magnesium Sulfate anhydrous — Extra Pure

황산마그네슘,무수
● CAS No. 7487-88-9 ● EC No. 231-298-2
● $MgSO_4$ ● FW 120.37

● Spec. density 2.66 g/cm³(20℃) ● Solub.in H_2O 300g/l(20℃) ● pH value ~7.9(50g/l, H_2O, 25℃) ● Bulk density ~600kg/m³

● IMDG No Dangerous Good
● HS Code 2833 21 00 ● Merck Index 10, 5513

Appearance	White crystals or crystalline powder.
Assay (after ignition)	Min 98.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.003%
Nitrate (NO_3)	To pass test
Ammonium (NH_4)	Max 0.006%
Calcium(Ca)	To pass test
Lead (Pb)	Max 0.001%
Arsenic (As)	Max 3ppm
Iron (Fe)	Max 0.002%

Product No.	Packing	Price(₩)
333	500g	8,800
334	1kg	13,800
335	25kg	218,800

Magnesium Sulfate heptahydrate — Extra Pure

황산마그네슘
● CAS No. 10034-99-8 ● EC No. 231-298-2
● $MgSO_4 \cdot 7H_2O$ ● FW 246.48

● Spec. density 1.68 g/cm³(20℃) ● Solub.in H_2O 710g/l(20℃) ● pH value 5.0-8.0(50g/l, H_2O, 25℃) ● Bulk density ~900kg/m³

● IMDG No Dangerous Good
● HS Code 2833 21 00 ● RTECS OM4508000 ● Merck Index 10, 5513

Appearance	Colorless crystals.
Assay	Min 99.0%
Solubility in water	To pass test
pH (5 w/v %, 25℃)	5.0 ~ 8.0
Chloride (Cl)	Max 0.003%
Nitrate (NO_3)	To pass test
Ammonium (NH_4)	Max 0.006%
Calcium (Ca)	To pass test
Lead (Pb)	Max 0.001%
Arsenic (As)	Max 3ppm
Iron (Fe)	Max 0.002%

Product No.	Packing	Price(₩)
338	500g	4,400
5455	5kg	27,000
339	25kg	68,300

Magnesium turnings — Extra Pure

- CAS No. 7439-95-4
- Mg • FW 24.31

Appearance ····· Silvery-white metal rod, shape, type, Ribbon, and flakes are formed.
Assay ····· Min 98.0%
Copper (Cu) ····· Max 0.02%
Zinc (Zn) ····· Max 0.05%
Aluminium (Al) ····· Max 0.05%
Silicon (Si) ····· Max 0.05%
Manganese (Mn) ····· Max 0.1%
Iron (Fe) ····· Max 0.05%

Product No.	Packing	Price(₩)
1225	25g	7,500
1226	500g	72,000

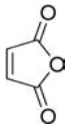
Malachite Green Oxalate — Indicator

말라카이트그린, CI-42000
- CAS No. 2437-29-8 • EC No. 219-441-7
- $C_{52}H_{54}N_4O_{12}$ • FW 927.03

Appearance ····· Crystal of the green metallic luster or Crystalline powder.
Assay ····· Min 80.0%
Loss on drying ····· Max 10.0%
Ignition residue (as Sulfate) ····· Max 1.0%
Hydrochloric acid ····· To pass test

Product No.	Packing	Price(₩)
2155	25g	8,000

Maleic Anhydride — GR



말레산,무수, 2,5-Furanedione
- CAS No. 108-31-6 • EC No. 203-571-6
- $C_4H_2O_3$ • FW 98.06

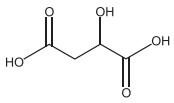
- Vapour pressure 1.33hPa(44℃) • Spec. density 1.32 g/cm³(55℃) • Explosive limit 1.4-7.1Vol% • Flash point 103℃c.c. • Solub.in H_2O (20℃) soluble (decomposition) • pH value 0.8(550g/l, H_2O, 20℃) (hydrolysis) • Melting point 51-53℃ • Bulk density 700-800kg/m³ • Boiling point 202℃(1013hPa) • Ignition temp. 475℃(DIN51794)

- IMDG UN 2215 MALEIC ANHYDRIDE, 8, III
- HS Code 2917 14 00 • Merck Index 10, 5526

Appearance ····· White crystalline powder or lumps and is hygroscopic.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Melting point ····· 52 ~ 54℃
Ignition residue (as Sulfate) ····· Max 0.01%
Chloride (Cl) ····· Max 0.001%
Sulfur Compounds (as S) ····· Max 0.001%
Heavy Metals (as Pb) ····· Max 5ppm
Iron(Fe) ····· Max 5ppm

Product No.	Packing	Price(₩)
342	500g	7,000

DL-Malic acid — Extra Pure



말릭산(사과산)
- CAS No. 617-48-1 • EC No. 230-022-8
- $C_4H_6O_5$ • FW 134.09

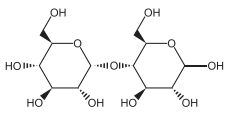
- Spec. density 1.60g/cm³(20℃) • Flash point 203℃ • Solub.in H_2O 558g/l(20℃) • pH value ~2.3(10g/l, H_2O, 20℃) • Melting point 128-132℃ • Bulk density ~800kg/m³ • Ignition temp. 349℃

- IMDG No Dangerous Good
- HS Code 2918 19 85 • RTECS ON7175000

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Heavy metals(asPb) ····· Max. 20ppm

Product No.	Packing	Price(₩)
343	500g	8,800
344	25kg	187,500

Maltose monohydrate — Extra Pure



말토스
- CAS No. 6363-53-7
- EC No. 200-716-5
- $C_{12}H_{22}O_{11} \cdot H_2O$ • FW 360.32

- Solub.in H_2O 1080g/l(20℃) • pH value (50g/l, H_2O, 20℃) neutral • Melting point ~160-165℃ • Bulk density ~320kg/m³

- IMDG No Dangerous Good
- HS Code 1702 90 10

Product No.	Packing	Price(₩)
2160	25g	6,500

Manganese Dioxide

이산화망가니즈, Manganese(IV) Oxide
- CAS No. 1313-13-9 • EC No. 215-202-6
- MnO_2 • FW 86.94

- Spec. density 5.03 g/cm³(20℃) • Solub.in H_2O (20℃) insoluble • Bulk density ~600-800kg/m³

- IMDG UN 1479 OXIDIZING SOLID, N.O.S. (MANGANESE(IV)OXIDE), 5.1, II
- HS Code 2602 00 00 • RTECS OP0350000 • Merck Index 10, 5552

Manganese Dioxide — Extra Pure

Product No.	Packing	Price(₩)
5656	1kg	12,500

Manganese Dioxide — CP

Product No.	Packing	Price(₩)
366	500g	7,000
2167	25kg	118,800

Manganese Sulfate monohydrate — CP

황산망가니즈
- CAS No. 10034-96-5 • EC No. 232-089-9
- $MnSO_4 \cdot H_2O$ • FW 169.02

- Spec. density 2.95 g/cm³(20℃) • Solub.in H_2O 762g/l(20℃) soluble (decomposition) • pH value 3.0-3.5(50g/l, H_2O, 20℃) • Melting point 700℃ (anhydrous substance) • Bulk density ~1000-1200kg/m³

M

● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (MANGANESE(II)-SULPHATE), 9, III
● HS Code 2833 29 90 ● RTECS OP0893500

Appearance ····· Brownish red crystalline powder.
Assay ····· Min 98.0%
Lead(Pb) ····· Max 0.005%
Iron(Fe) ····· Max 0.003%

Product No.	Packing	Price(₩)
374	500g	8,800
3184	25kg	500,000

Manganese Sulfate, pentahydrate GR

황산망가니즈
● CAS No. 15244-36-7
● $MnSO_4 \cdot 5H_2O$ ● FW 241.08

Appearance ····· Is a light pink crystals or crystalline powder.
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 4.0 ~ 6.5
Chloride (Cl) ····· Max 0.001%
Sodium (Na) ····· Max 0.005%
Potassium(K) ····· Max 0.002%
Copper (Cu) ····· Max 5ppm
Magnesium (Mg) ····· Max 0.005%
Calcium(Ca) ····· Max 0.005%
Zinc (Zn) ····· Max 0.001
Lead (Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%
Nickel (Ni) ····· Max 0.002%
Substances reducing permanganate ····· To pass test

Product No.	Packing	Price(₩)
380	500g	28,500

Manganese(Ⅳ) oxide → *go to Manganese Dioxide*

Manganese(II) Carbonate CP

탄산망가니즈
● CAS No. 598-62-9
● $MnCO_3$ ● FW 114.94

Appearance ····· White~pink, yellow powder.
Assay ····· 92.0 ~ 95.5%
Chloride (Cl) ····· Max 0.004%
Sulfate (SO_4) ····· Max 0.01%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
1703	500g	25,000

Manganese(II) Chloride, tetrahydrate CP

염화망가니즈
● CAS No. 13446-34-9 ● EC No. 231-869-6
● $MnCl_2 \cdot 4H_2O$ ● FW 197.91

● Spec. density 2.01 g/cm³(20℃) ● Solub.in H_2O 1980g/l(20℃) ● pH value 3.5-6(50g/l, H_2O, 25℃) ● Melting point 650℃ (anhydrous substance) ● Bulk density ~1150kg/m³ ● Boiling point 1190℃(anhydrous substance)

● HS Code 2827 39 85 ● Merck Index 10, 5550

Appearance ····· Is a light pink crystals or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 4.0 ~ 6.0
Sulfate (SO_4) ····· Max 0.005%
Sodium (Na) ····· Max 0.005%
Potassium(K) ····· Max 0.002%
Copper (Cu) ····· Max 5ppm
Magnesium (Mg) ····· Max 0.005%
Calcium(Ca) ····· Max 0.005%
Zinc (Zn) ····· Max 0.001%
Lead (Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%
Nickel (Ni) ····· Max 0.002%

Product No.	Packing	Price(₩)
363	500g	8,800
365	25kg	187,500

Manganese(II) Nitrate, hexahydrate Extra Pure

질산망가니즈
● CAS No. 17141-63-8
● $Mn(NO_3)_2 \cdot 6H_2O$ ● FW 287.03

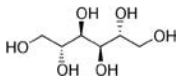
Appearance ····· Deliquescent crystals or liquids of light pink.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· Min 3.5
Chloride (Cl) ····· Max 0.003%
Sulfate (SO_4) ····· Max 0.01%
Lead (Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
2171	1kg	21,000

Manganese(II) Nitrate 50% Solution Extra Pure

Product No.	Packing	Price(₩)
3842	1kg	25,000

D-Mannitol Extra Pure



만니톨
● CAS No. 69-65-8 ● EC No. 200-711-8
● $C_6H_{14}O_6$ ● FW 182.17

● Spec. density 0.40g/cm³(20℃) ● Solub.in H_2O 213g/l(20℃) ● pH value 5-7(100g/l, H_2O, 20℃) ● Melting point 164-169℃ ● Bulk density ~400-500kg/m³ ● Boiling point 290-295℃(4hPa)

● IMDG No Dangerous Good
● HS Code 2905 43 00 ● RTECS OP2060000

Appearance ····· Is a white crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Melting point ····· 165 ~ 168℃
Specific rotation (α) 20 D ····· +21.0 ~ +23.0
Loss on drying (at.105℃,4hr.) ····· Max 1.5%
Ignition residue (as Sulfate) ····· Max 0.1%
Acidity (as CH_3COOH) ····· Max 0.012%
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.05%
Heavy metals (as Pb) ····· Max 0.005%
Reducing sugars ····· Max 0.05%

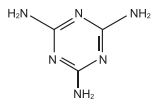
Product No.	Packing	Price(₩)
386	500g	15,000
388	20kg	212,500

MEK → *go to Methyl Ethyl Ketone*

M

NEW

Melamine — Extra Pure



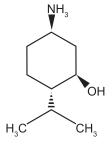
멜라민, 2,4,6-Triamino-s-triazine
● CAS No. 108-78-1 ● EC No. 203-615-4
● $C_3H_6N_6$ ● FW 126.12

● Spec. density 1.573 g/cm³ (20 ℃) ● Solub. in H_2O 3.2 g/l (20 ℃) ● Vapor pressure 66.65 hPa (315 ℃) ● pH value 7 – 8 (32 g/l, H_2O, 20 ℃) ● Melting point 354 ℃ (decomposition) ● Bulk density 800 kg/m³ ● Boiling point 〉354 ℃ (1013 hPa) (sublimed) ● Ignition temp.〉600 ℃

● IMDG NO Dangerous Good ● HS Code 2933 61 00
● RTECS OS0700000

Product No.	Packing	Price(₩)
5176	500g	11,300

L-Menthol



멘톨, (1R,2S,5R)-(-)-2-Iospropyl-5-methylcyclo-hexanol
● CAS No. 2216-51-5 ● EC No. 218-690-9
● $C_{10}H_{20}O$ ● FW 156.27

● Flash point ~96℃ ● Melting point 41-44℃
● Bulk density ~450kg/m³ ● Boiling point ~216℃

● IMDG No Dangerous Good
● HS Code 2906 11 00 ● RTECS OT0700000 ● Merck Index 10, 5662

L-Menthol — Extra Pure

Appearance ····· Colorless crystals, and the pleasant smell unusual. Huggy shots cool taste.
Assay ····· Min 98.0%
Melting point ····· 42 ~ 44℃
Loss on drying (at.105℃, 2hr.) ····· Max 0.002%
Thymol ····· To pass test
Nitromethan & Nitroethan ····· To pass test

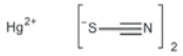
Product No.	Packing	Price(₩)
390	25g	9,400

L-Menthol — CP

Product No.	Packing	Price(₩)
2173	500g	45,000

NEW

Mercuric Thiocyanate — GR



수은티오시아네이트
Mercury(II) Thiocyanate, Mercury Sulfocyanide
● CAS No. 592-85-8 ● EC No. 209-773-0
● $C_2HgN_2S_2$ ● FW 316.76

● Spec. density 4 g/cm³ (20 ℃) ● Solub. in H_2O 0.7 g/l (20℃) ● pH value ca.5 (50 g/l, H_2O, 20 ℃) (slurry) ● Melting point 165 ℃ (decomposition) ● Bulk density ~ 750 kg/m³ ● Flash point 120 ℃

● IMDG UN 1646 MERCURY THIOCYANATE, 6.1, II, Marine Pollutant: P
● HS Code 2852 00 00 ● Merck Index 10, 5730

Appearance ····· White to off- White crystalline powder.
Assay ····· Min 99.0%
Ignition residue (as Sulfate) ····· Max 0.05%
Sulfate (SO_4) ····· Max 0.01%
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
5070	25g	40,000

Mercurous Chloride — Extra Pure

NEW

염화제일수은, Mercury(Ⅰ) Chloride
● CAS No. 10112-91-1 ● EC No. 233-307-5
● Cl_2Hg_2 ● FW 472.08

● Spec. density 6.993 ~ 7.15 g/cm³ (20 ℃) ● Solub. in H_2O 0.0023 g/l (20 ℃) ● Vapor pressure 66.65 hPa (315 ℃) ● Bulk density ~ 1200 kg/m³

● IMDG UN2025 MERCURY COMPOUND, SOLID, N.O.S., 6.1, Ⅲ
● HS Code 2852 00 00 ● Merck Index 10, 5736

Product No.	Packing	Price(₩)
5177	25g	30,000

Mercury — Extra Pure

수은
● CAS No. 7439-97-6 ● EC No. 231-873-8
● Hg ● FW 200.59

● Vapour pressure 0.17hPa(20℃) ● Spec. density 13.55 g/cm³(20℃) ● Solub. in H_2O 0.06mg/l(25℃) ● Melting point -39℃ ● Boiling point 357℃(1013hPa)

● IMDG UN 2809 MERCURY, 8, Ⅲ
● HS Code 2805 40 90 ● Merck Index 10, 5742

Product No.	Packing	Price(₩)
2747	400g	120,000

Mercury(II) Acetate — Extra Pure

● CAS No. 1600-27-7
● $(CH_3COO)_2Hg$ ● FW 318.7

Product No.	Packing	Price(₩)
4573	25g	22,500
4574	500g	330,000

Mercury(I) Chloride → *go to Mercurous Chloride*

Mercury(II) Chloride — Extra Pure

염화제이수은, Mercury(II)chloride
● CAS No. 7487-94-7 ● EC No. 231-299-8
● $HgCl_2$ ● FW 271.50

● Vapour pressure 0.01hPa(20℃) ● Spec. density 5.44 g/cm³(20℃) ● Solub.in H_2O 74g/l(20℃) ● pH value 3.2(15g/l, H_2O) ● Melting point 280.7℃ ● Bulk density ~2000kg/m³ ● Boiling point 302℃(sublimed)

● IMDG UN 1624 MERCURIC CHLORIDE, 6.1, II, Marine Pollutant:PP
● HS Code 2852 00 00 ● RTECS OV9100000 ● Merck Index 10, 5710

Product No.	Packing	Price(₩)
2174	25g	16,000
2175	500g	230,000

Mercury(II) Iodide, Red — Extra Pure

아이오딘화수은, 적색
● CAS No. 7774-29-0 ● EC No. 231-299-8
● HgI_2 ● FW 454.4

● Vapour pressure ~0.006hPa(80℃) ● Spec. density 6.36 g/cm³(25℃) ● Solub.

M

in H_2O 0.06g/l(25℃) ● pH value 6–7(50g/l, H_2O, 20℃) ● Melting point 259℃ ● Bulk density ~1350kg/m³ ● Boiling point 354℃(sublimed)

● IMDG UN 1638 MERCURY IODIDE, 6.1, II, Marine Pollutant:PP
● HS Code 2852 00 00 ● RTECS OW5250000 ● Merck Index 10, 5716

Solubility in potassium iodide solution ····· To pass test
Mercurous Mercury (as Hg) ····· Max 0.1%
Soluble Mercury salts (as Hg) ····· Max 0.05%
Assay (HgI_2; Dried Basis) ····· Min 98.5%

Product No.	Packing	Price(₩)
2176	25g	22,500

NEW

Mercury(II) Nitrate monohydrate GR / AR / ACS

● CAS No. 7783–34–8
● $Hg(NO_3)_2 \cdot H_2O$ ● FW 342.61

Product No.	Packing	Price(₩)
4589	250g	281,300

Mercury(II) Sulfate GR

● CAS No. 7783–35–9
● $HgSO_4$ ● FW 296.65

Product No.	Packing	Price(₩)
4014	500g	218,000

Mercury(II) Thiocyanate → *go to Mercuric Thiocyanate*

Mesyl chloride → *go to Methane Sulfonyl Chloride*

NEW

meta-Phosphoric Acid Extra Pure / AR

메테인산
● CAS No. 37267–86–0

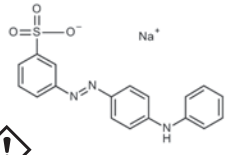
● Spec. density 2.0 g/cm³ (20 ℃) ● Solub. in H_2O (20 ℃) soluble,Hydrolysis ● pH value 2 (33 g/l, H_2O, 20 ℃) ● Melting point 200 – 250 ℃ ● Bulk density ~ 1000 kg/m³ ● Boiling point 600 ℃ (1013 hPa)

● IMDG UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., 8, III
● HS Code 2809 20 00 ● Merck Index 10, 7229

Product No.	Packing	Price(₩)
5179	500g	23,000

NEW

Metanil Yellow GR



메타닐옐로우, Acid Yellow 36
● CAS No. 587–98–4 ● EC No. 209–608–2
● $C_{18}H_{14}N_3NaO_3S$ ● FW 375.38

● Solub. in H_2O 25 g/l (20℃) ● pH value 10 (10 g/l, H_2O, 20 ℃) ● Bulk density ~ 330 kg/m³

● IMDG NO Dangerous Good ● HS Code 2927 00 00

Product No.	Packing	Price(₩)
5178	25g	11,300

Methacrylic acid Extra Pure

메타아크릴산, 2–Methylpropenoic acid
● CAS No. 79–41–4 ● EC No. 201–204–4
● $C_4H_6O_2$ ● FW 86.09

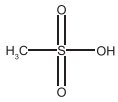
● Vapour pressure <1hPa(20℃) ● Spec. density 1.015g/cm³(20℃) ● Explosive limit 1.6–8.7Vol% ● Flash point 65℃(DIN51755) ● Solub.in H_2O(20℃) soluble ● pH value 2.0–2.2(100g/l, H_2O, 20℃) ● Melting point 15℃ ● Boiling point 161℃(1013hPa) ● Ignition temp. 370℃(DIN51794)

● IMDG UN 2531 METHACRYLIC ACID, STABILIZED, 8, II
● HS Code 2976 13 00 ● RTECS OZ2975000
● 4류 제3석유류 (수용성 액체) 4000ℓ
● Merck Index 10, 5796

Product No.	Packing	Price(₩)
437	500g	12,000
2177	1kg	20,000

Methacrylic acid butyl ester → *go to Butyl Methacrylate monomer*

Methanesulfonic acid Extra Pure



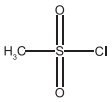
메탄설폰산, Sulfomethane
● CAS No. 75–75–2 ● EC No. 200–898–6
● CH_3SO_3H ● FW 96.11

● Vapour pressure <1hPa(20℃) ● Spec. density 1.48g/cm³(20℃) ● Flash point 189℃c.c. ● Solub. in H_2O 1000g/l(20℃) ● Melting point 20℃ ● Boiling point 167℃(13hPa)

● IMDG UN 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (METHANESULFONIC ACID), 8(6.1), II, Segregation Group: 1(Acids)
● HS Code 2904 10 00 ● Merck Index 10, 5813

Product No.	Packing	Price(₩)
2178	500g	32,500

Methanesulfonyl chloride



메탈설포닐클로라이드, Mesyl chloride
● CAS No. 124–63–0 ● EC No. 204–706–1
● CH_3SO_2Cl ● FW 114.55

● Refractive index 1.45(20℃) ● Vapour pressure 2.79hPa(20℃) ● Spec. density 1.478g/cm³(20℃) ● Flash point >110℃o.c. ● Solub.in H_2O (20℃) insoluble ● Melting point –32℃ ● Boiling point 161℃(1013hPa)

● IMDG UN 3246 METHANESULPHONYL CHLORIDE, 6.1(8), 1
● HS Code 2904 90 20 ● 4류 제3석유류 (비수용성 액체) 2000ℓ
● Merck Index 10, 5814

Methanesulfonyl chloride Extra Pure

Product No.	Packing	Price(₩)
2182	500g	16,000
2183	25kg	200,000

M

Methanesulfonyl chloride GR

Appearance ····· Colorless–pale yellow,clear liquid.
Assay ····· Min 99.0%
Water ····· Max 0.1%

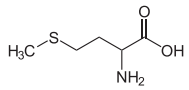
Soubility in water ····· To pass test
Specific gravity at 20 ····· 1.473 ~ 1.478℃
Refractive index at 20 ····· 1.449 ~ 1.454℃

Product No.	Packing	Price(₩)
449	500g	16,000
4725	1kg	30,000

Methanoic acid → *go to Formic acid*

Methanol → *go to Methyl Alcohol*

DL-Methionine Extra Pure



메티오닌
● CAS No. 59–51–8 ● EC No. 200–432–1
● $C_5H_{11}NO_2S$ ● FW 149.21

● Spec. density 1.34g/cm³(20℃) ● Explosive limit 30g/m³ ● Solub.in H_2O 34g/l(25℃) ● pH value 5.6–6.1(20g/l, H_2O, 20℃) ● Melting point 265–275℃ ● Bulk density ~480kg/m³ ● Ignition temp. 390℃

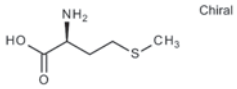
● IMDG No Dangerous Good
● HS Code 2930 40 90 ● Merck Index 10, 5840

Appearance ····· White crystals or flakes are small.
Assay (after dried) ····· Min 98.5%
Solubility in water ····· To pass test
Loss on drying (at.105℃,4hr.) ····· Max 0.5%
Ignition residue (as Sulfate) ····· Max 0.1%
Chloride (Cl) ····· Max 0.021%
Sulfate (SO_4) ····· Max 0.048%
Ammonium (NH_4) ····· To pass test
Arsenic (As) ····· Max 2ppm

Product No.	Packing	Price(₩)
472	25g	7,000
475	500g	26,000

NEW

L-Methionine



Chiral

L-메티오닌, L-2-Amino-4-(methylthio)butyric acid
● CAS No. 63–68–3 ● EC No. 200–562–9
● $C_5H_{11}NO_2S$ ● FW 149.2

● Solub. in H_2O 48 g/l (20 ℃) ● pH value 5 – 7 (10 g/l, H_2O, 20 ℃) ● Melting point 280 – 285 ℃ ● Bulk density ~ 550 kg/m³

● IMDG NO Dangerous Good ● HS Code 2930 40 10
● RTECS PD0457000

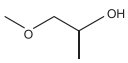
Product No.	Packing	Price(₩)
5180	25g	14,000

Methoxybenzene → *go to Anisole*

2-Methoxyethanol → *go to Ethylene Glycol monomethyl ether*

2-Methoxyethyl Ether → *go to Diethylene glycol dimethyl ether*

1-Methoxy-2-Propanol GR



1-메톡시-2-프로판올, Propylene glycol monomethyl ether
● CAS No. 107–98–2 ● EC No. 203–539–1
● $CH_3OCH_2CH(OH)CH_3$ ● FW 90.12

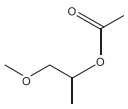
● Refractive index 1.4034 (20℃, 589nm) ● Vapour pressure 11.5hPa (20℃) ● Spec. density 0.92 g/cm³ (20℃) ● Explosive limit 1.48 ~ 13.74%(V) ● Flash point 31℃ ● Solub.in H_2O soluble ● pH value 4~7 (200 g/ℓ, H_2O, 20℃) ● Melting point −97℃ ● Boiling point 120℃ (1013mbar)

● IMDG UN3092 1-METHOXY-2-PROPANOL, 3, III ● HS Code 2909 49 80
● RTECS UB7700000 ● 4류 2석유류 (수용성 액체) 2000ℓ

Appearance ····· Colorless, Clear liquid.
Assay (by GC) ····· Min 99.5%
Color (APHA) ····· Max 10
Water ····· Max 0.1%
Density at 20℃ ····· 0.920 ~ 0.925
Refractive index at 20℃ ····· 1.402 ~ 1.405
Solubility in ethanol ····· To pass test
Acidity (as CH_3COOH) ····· Max 0.01%

Product No.	Packing	Price(₩)
4629	1ℓ	18,000

1-Methoxy-2-Propyl Acetate GR



1-메톡시-2-프로판올아세테이트, Propylene glycol monomethyl ether acetate, Acetic acid 2-methoxy-propyl ester
● CAS No. 108–65–6 ● EC No. 203–603–9
● $CH_3COOCH_2CH(OCH_3)CH_3$ ● FW 132.16

● Refractive index 1.4078 (20℃, 589nm) ● Vapour pressure 5hPa (20℃) ● Spec. density 0.97 g/cm³ (20℃) ● Explosive limit 1.3 ~ 10.8%(V) ● Flash point 45℃ ● Solub.in H_2O 209.3 g/ℓ (20℃) ● pH value 4 (200 g/ℓ, H_2O, 20℃) ● Melting point −67℃ ● Boiling point 146℃

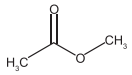
● IMDG N3272 ESTERS, N.O.S.(1-METHOXY-2-PROPYLACETATE), 3, III
● HS Code 2915 39 00
● RTECS AI8925000 ● 4류 2석유류 (비수용성 액체) 1000ℓ

Appearance ····· Clear liquid.
Assay (by GC) ····· Min 99.5%
Color (APHA) ····· Max 10
Water ····· Max 0.03%
Density at 20℃ ····· 0.965~0.969
Refractive index at 20℃ ····· 1.399~1.404
Solubility in ethanol ····· To pass test
Acidity (as CH_3COOH) ····· Max 0.02%

Product No.	Packing	Price(₩)
4630	1ℓ	16,300
4328	18ℓ	125,000

M

Methyl Acetate — Extra Pure



아세트산메틸, Acetic acid methyl ester
● CAS No. 79-20-9 ● EC No. 201-185-2
● CH_3COOCH_3 ● FW 74.08

● Vapour pressure 217hPa(20℃) ● Spec. density 0.93 g/cm³(20℃) ● Explosive limit 3.1-16Vol% ● Flash point -13℃(DIN51755) ● Solub.in H_2O 250g/l (20℃) ● Saturation conc. 665g/m³ (20℃) ● Melting point -98℃ ● Boiling point 56-58℃ ● Ignition temp. 455℃(DIN51794)

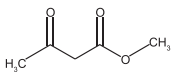
● IMDG UN 1231 METHYL ACETATE, 3, II
● HS Code 2915 39 30 ● RTECS AI9100000
● 4류 제1석유류 (비수용성 액체) 200ℓ
● Merck Index 10, 5886

Appearance ····· Colorless, volatile liquid has a characteristic smell.
Assay (by GC) ····· Min 99.5%
Density (20℃) ····· 0.930 ~ 0.945g/ml
Water ····· Max 0.5%
Residue after evaporation ····· Max 0.005%
Acidity (as CH_3COOH) ····· Max 0.01%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
511	1ℓ	12,000
514	18ℓ	91,300

Methyl acetic acid → *go to Propionic acid*

Methyl Acetoacetate — CP



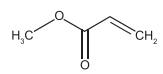
메틸아세토아세테이트, Methyl 3-oxobutanoate
● CAS No. 105-45-3 ● EC No. 203-299-8
● $CH_3COCH_2CO_2CH_3$ ● FW 116.12

● Vapour pressure 1hPa(20℃) ● Spec. density 1.08 g/cm³(20℃) ● Explosive limit 1.3-14.2Vol% ● Flash point 67℃ ● Solub.in H_2O 863g/l(20℃) ● pH value 3.8(863g/l, H_2O, 20℃) ● Melting point -39℃ ● Boiling point 170℃(1013hPa) ● Ignition temp. 260℃

● IMDG No Dangerous Good
● HS Code 2918 30 00 ● Merck Index 10, 5887

Product No.	Packing	Price(₩)
517	1ℓ	26,300

Methyl Acrylate, monomer — GR



아크릴산메틸, Methyl propenoate
● CAS No. 96-33-3 ● EC No. 202-500-6
● $H_2C=CHCOOCH_3$ ● FW 86.09

● Vapour pressure 93hPa(20℃) ● Spec. density 0.95 g/cm³ ● Explosive limit 2.8-25Vol% ● Flash point -2.7℃c.c.(DIN51755) ● Solub.in H_2O 52g/l (25℃) ● Melting point -74℃ ● Boiling point 79-81℃ ● Water absorption 250g/kg(20℃) ● Ignition temp. 415℃

● IMDG UN 1919 METHYL ACRYLATE, STABILIZED, 3, II
● HS Code 2916 12 10 ● Merck Index 10, 5889

Product No.	Packing	Price(₩)
522	500㎖	8,800

Methyl Alcohol

메틸알콜(메탄올), Methanol
● CAS No. 67-56-1 ● EC No. 200-659-6
● CH_3OH ● FW 32.04

● Vapour pressure 128hPa(20℃) ● Spec. density 0.79 g/cm³(20℃) ● Explosive limit 5.5-36.5Vol% ● Flash point 11℃c.c. ● Solub.in H_2O (20℃) soluble ● Saturation conc. 166g/m³(20℃) ● Melting point -98℃ ● Boiling point 64.5℃ (1013hPa) ● Ignition temp. 455℃ (DIN51794)

● IMDG UN 1230 METHANOL, 3(6.1), II
● HS Code 2905 11 00 ● RTECS PC1400000
● 4류 알코올류 400ℓ
● Merck Index 10, 5816

Methyl Alcohol — Bio

Ultraviolet Spectrophotometry
Maximum UV Absorbance
205 nm ····· Max 1.00
220 nm ····· Max 0.25
230 nm ····· Max 0.15
254 nm ····· Max 0.02
280 nm ····· Max 0.01
UV Cutoff ····· Max 205nm
Acetone ····· To pass test (about 0.001%)
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.03%
Residue after Evaporation ····· Max 3ppm
Titrable acid ····· Max 0.0003mEq/g
Titrable base ····· Max 0.0002mEq/g
Substances reducing permanganate ····· To pass test
Solubility in Water ····· To pass test

Product No.	Packing	Price(₩)
2722	4ℓ	Call

M

Methyl Alcohol ELH

Assay ····· Min 99.9%
Color (APHA) ····· Max 10
Alkalinity ····· Max 1ppm
Acidity ····· Max 20ppm
Water ····· Max 0.05%
Residue After Evaporation ····· Max 5ppm
Chloride (Cl) ····· Max 0.2ppm
Phosphate (PO_4) ····· Max 0.5ppm
Aluminium (Al) ····· Max 10ppb
Arsenic (As) ····· Max 1ppb
Barium (Ba) ····· Max 1ppb
Cadmium (Cd) ····· Max 1ppb
Calcium (Ca) ····· Max 5ppb
Chromium (Cr) ····· Max 2ppb
Cobalt (Co) ····· Max 1ppb
Copper (Cu) ····· Max 1ppb
Iron (Fe) ····· Max 10ppb
Lead (Pb) ····· Max 1ppb
Lithium (Li) ····· Max 1ppb
Magnesium (Mg) ····· Max 1ppb
Manganese (Mn) ····· Max 1ppb
Nickel (Ni) ····· Max 1ppb
Potassium (K) ····· Max 5ppb
Silver (Ag) ····· Max 1ppb
Sodium (Na) ····· Max 20ppb
Strontium (Sr) ····· Max 1ppb
Zinc (Zn) ····· Max 1ppb
Particle Count (0.5 micron and above) ····· Max 30pcs/mlt

Product No.	Packing	Price(₩)
1714	3.8 ℓ	9,400
2719	20 ℓ	41,300
2720	200 ℓ	387,500

Methyl Alcohol Extra Pure

Appearance ····· Volatile,clear, colourless liquid.
Assay (by GC) ····· Min 99.8%
Solubility in water ····· To pass test
Refractive index (n 20 D) ····· 1.327 ~ 1.330
Water ····· Max 0.3%
Density (20℃) ····· Max 0.801g/ml
Acidity (as HCOOH) ····· Max 0.004%
Alkalinity (as NH_3) ····· Max 0.005%
Acetone or aldehyde ····· Max 0.005%
Ethyl alcohol(C_2H_5 OH) ····· Max 0.05%
Substances darkened by sulfuric acid ····· To pass test
Substances reducing permanganate(asO) ····· To pass test
Residue after evaporation ····· Max 0.003%

Product No.	Packing	Price(₩)
58	500㎖	3,800
59	1 ℓ	5,000
60	18 ℓ	23,000
2191	200 ℓ	Call

Methyl Alcohol GR

Appearance ····· Volatile,clear, colourless liquid.
Assay (by GC) ····· Min 99.8%
Density (20℃) ····· 0.791 ~ 0.793g/ml
Solubility in water ····· To pass test
Refractive index (n 20 D) ····· 1.327 ~ 1.330
Water ····· Max 0.1%
Residue after evaporation ····· Max 5ppm
Acidity (as HCOOH) ····· Max 0.002%
Alkalinity (as NH_3) ····· Max 3ppm
Acetone or aldehyde ····· Max 0.005%
Ethyl alcohol(C_2H_5 OH) ····· Max 0.05%
Substances darkened by sulfuric acid ····· To pass test
Substances reducing permanganate (asO) ····· Max 5ppm

Product No.	Packing	Price(₩)
57	1 ℓ	7,000
4125	2.5 ℓ	9,500
3457	3.8 ℓ	12,500
2194	4 ℓ	15,000
52	18 ℓ	26,000

Methyl Alcohol HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
205 nm ····· Max 1.00
220 nm ····· Max 0.25
230 nm ····· Max 0.15
254 nm ····· Max 0.02
280 nm ····· Max 0.01
UV Cutoff ····· Max 205nm
LC Gradient suitability
Gradient Elution test ····· To pass test
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.05%
Residue after evaporation ····· Max 3ppm
Titratable Acid ····· Max 0.0003 mEq/g
Titratable Base ····· Max 0.0002 mEq/g
Carbonyl Compounds
(each of Acetone, Formaldehyde and Acetaldehyde) ···· Max 0.001%
Substances darkened by sulfuric acid ····· To pass test
Substances reducing permanganate ····· To pass test
Solubility in Water ····· To pass test

Product No.	Packing	Price(₩)
2818	1 ℓ	6,300
4293	2.5 ℓ	13,800
62	4 ℓ	16,300

Methyl Alcohol PESTICIDE

Extraction–Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10ppt
Assay (by GC) ····· Min 99.8%
Color (APHA) ····· Max 10
Water ····· Max 0.2%
Residue after Evaporation ····· Max 5ppm

Product No.	Packing	Price(₩)
63	4 ℓ	31,300

Methyl Alcohol LC–MS

LC–MS Suitability
ESI+ mode (as Reserpine) ····· Max 50 ppb
ESI– mode (as 4–Nitrophenol) ····· Max 50 ppb
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.05%
Residue after evaporation ····· Max 10 ppm
Titratable Acid ····· Max 0.0003 meq/g
Titratable Base ····· Max 0.0002 meq/g
Ultraviolet Spectrophotometry
Maximum UV Absorbance
205 nm ····· Max 1.00
220 nm ····· Max 0.25
230 nm ····· Max 0.15
254 nm ····· Max 0.02
280 nm ····· Max 0.01
UV Cutoff ····· Max 205nm
LC Gradient suitability ····· To pass test
Metal impurities ····· To pass test
Aluminum (Al) ····· Max 25 ppb

M

Barium (Ba) ····· Max 5 ppb
Cadmium (Cd) ····· Max 5 ppb
Calcium (Ca) ····· Max 25 ppb
Chromium (Cr) ····· Max 5 ppb
Cobalt (Co ····· Max 5 ppb
Copper (Cu) ····· Max 5 ppb
Iron (Fe) ····· Max 5 ppb
Leed (Pb) ····· Max 5 ppb
Magnesium (Mg) ····· Max 25 ppb
Manganese (Mn) ····· Max 5 ppb
Litium (Li) ····· Max 5 ppb
Nickel (Ni) ····· Max 5 ppb
Potassium (K) ····· Max 25 ppb
Silver (Ag) ····· Max 5 ppb
Sodium (Na) ····· Max 50 ppb
Tin (Sn) ····· Max 5 ppb
Zinc (Zn) ····· Max 5 ppb

Product No.	Packing	Price(₩)
3041	4 ℓ	22,500

Methyl Alcohol — Ultimate

Extraction–Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10ppt
FID Detectable residue (as 2–Octanol) ····· Max 5ppb
Ultraviolet Spectrophotometry
Maximum UV Absorbance
205 nm ····· Max 1.00
220 nm ····· Max 0.25
230 nm ····· Max 0.15
254 nm ····· Max 0.01
280 nm ····· Max 0.01
UV Cutoff ····· Max 205nm
LC Gradient Suitability
Gradient Elution test ····· To pass test
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.05%
Residue after Evaporation ····· Max 1ppm
Fluorescence Background ····· To pass test
Titratable Acid ····· Max 0.0003mEq/g
Titratable Base ····· Max 0.0002mEq/g
Cabonyl Compounds
(each of Acetone, Formaldehyde and Acetaldehyde) ···· Max 0.001%
Substances darkened by sulfuric acid ····· To pass test
Substances Resducing Permanganate ····· To pass test
Solubility in Water ····· To pass test

Product No.	Packing	Price(₩)
2721	4 ℓ	21,300

Methyl Alcohol — Ultra Dry

Assay (by GC) ····· Min 99.8%
Color (APHA) ····· Max 10
Water ····· Max 50ppm
Residue after Evaporation ····· Max 3ppm

Product No.	Packing	Price(₩)
66	4 ℓ	20,000

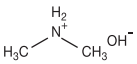
Methyl Alcohol - Dried — GR

Appearance ····· Volatile,clear, colourless liquid.
Assay (by GC) ····· Min 99.8%
Density (20℃) ····· Max 0.794g/ml
Solubility in water ····· To pass test
Refractive index (n 20 D) ····· 1.327 ~ 1.328
Water ····· Max 0.02%
Residue after evaporation ····· Max 0.0005%
Acidity (as HCOOH) ····· Max 0.002%
Alkalinity (as NH_3) ····· Max 0.0003%
Substances darkened by sulfuric acid ····· To pass test
Substances reducing permanganate (asO) ····· To pass test

Product No.	Packing	Price(₩)
49	1 ℓ	7,800
50	18 ℓ	56,000

Methylamine Solution 40% — Extra Pure

NEW



메틸아민 40% 용액
● CAS No. 74–89–5
● CH_5N ● FW 31.06

● Spec. density 0.89 g/cm³ (20℃) ● Vapor pressure 263 hPa (20℃) ● Solub. in H_2O (20℃) soluble ● Explosive limit 2.6 – 12.3 %(V) ● Flash point –18.5℃ (DIN 51755) ● pH value 14 (H_2O) ● Melting point –38℃

● IMDG UN 1235 METHYLAMINE, AQUEOUS SOLUTION, 3.8, II
● HS Code 2921 11 10 ● Merck Index 10, 3219 ● 제4류 1석유류

Product No.	Packing	Price(₩)
5181	1 ℓ	13,800

4-Methylaminophenol sulfate → *go to Metol*

Methyl benzene → *go to Toluene*

3-Methyl-1-butanol → *go to Iso-Amyl Alcohol*

Methyl tert-Butyl Ether

tert–부틸메틸에테르, tert–Butyl methyl ether, MTBE
● CAS No. 1634–04–4 ● EC No. 216–653–1
● $(CH_3)_3COCH_3$ ● FW 88.15

● Vapour pressure ~268hPa (20℃) ● Spec. density ~ 0.74g/cm³(20℃) ● Explosive limits 1.5 – 8.5 Vol% ● Flash point –28℃ c.c. ● Solub. in H_2O 42 g/l(20℃) ● Melting point –108.6℃ ● Boiling point 53.3℃ (1013 hPa) ● Ignition temp. 460℃ (DIN 51794)

● IMDG UN 1120 BUTANOLS, 3, II ● HS Code 2905 14 10

Methyl tert–Butyl Ether — Extra Pure

Assay (by GC) ····· Min 98.0%
Color (APHA) ····· Max 10
Water ····· Max 0.05%
Residue after evaporation ····· Max 0.001%
Peroxides (as H_2O_2) ····· Max 1ppm

Product No.	Packing	Price(₩)
1069	1 ℓ	16,300

Methyl tert–Butyl Ether — GR

Product No.	Packing	Price(₩)
3868	2.5 ℓ	37,500

M

Methyl tert-Butyl Ether — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
- 210 nm ····· Max 1.00
- 225 nm ····· Max 0.50
- 250 nm ····· Max 0.10
- 300 nm ····· Max 0.01
- 350 nm ····· Max 0.01
- UV Cutoff ····· Max 210nm

Assay (by GC) ····· Min 99.0%
Color (APHA) ····· Max 10.0
Water ····· Max 0.05%
Residue after evaporation ····· Max 5ppm
Peroxides (as H_2O_2, at time packaging) ····· Max 1ppm

Product No.	Packing	Price(₩)
1070	4 ℓ	75,000

Methyl cellosolve → *go to Ethylene Glycol monomethyl ether*

NEW

Methyl Cellulose (4000cps) — Extra Pure

메틸셀룰로오스(4000cps)
- CAS No. 9004-67-5

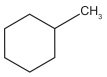
Appearance ····· White powder.
Viscosity (2%/20℃) ····· 30000 to 50000

Product No.	Packing	Price(₩)
4787	1kg	54,000

Methylchloroform → *go to 1,1,1-Trichloroethane*

Methyl cyanide → *go to Acetonitrile*

Methyl Cyclohexane — GR



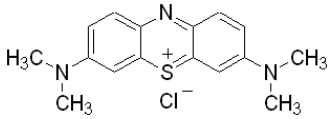
메틸싸이클로헥세인, Cyclohexylmethane
- CAS No. 108-87-2 • EC No. 203-624-3
- C_7H_{14} • FW 98.19

- Vapour pressure 48hPa(20℃) • Spec. density 0.77 g/cm³(20℃) • Explosive limit 1.1-6.7Vol% • Flash point -4℃c.c. • Solub.in H_2O 0.014g/l(20℃) • Saturation conc. 192g/m³(20℃) • Melting point -126℃ • Boiling point 100.9℃(1013hPa) • Ignition temp. 260℃

- IMDG UN 2296 METHYLCYCLOHEXANE, 3, II
- HS Code 2902 19 80 • RTECS GV6125000
- 4류 제1석유류 (비수용성 액체) 200ℓ

Product No.	Packing	Price(₩)
561	500mℓ	11,380
2198	1 ℓ	15,440

Methylene Blue trihydrate — Indicator



메틸렌블루, Methylthioninum chloride, C.I. 52015
- CAS No. 7220-79-3 • EC No. 200-515-2
- $C_{16}H_{18}ClN_3S \cdot 3H_2O$ • FW 373.90
- Solub.in H_2O 50g/l(20℃) • pH value ~3(10g/l, H_2O, 20℃) • Melting point ~180℃(decomposition) • Bulk density ~400-600kg/m³

- IMDG No Dangerous Good
- HS Code 3204 13 00

Appearance ····· Glossy, dark green crystalline powder.
Assay (after dried) ····· Min 95.0%
Ignition residue (as Sulfate) ····· Max 1.5%
Loss on drying (at 105℃) ····· Max 18.0%
Copper (Cu) ····· Max 0.1%
Zinc (Zn) ····· Max 0.05t

Product No.	Packing	Price(₩)
480	25g	8,000
5949	3kg	487,500

Methylene Chloride

염화메틸렌, Dichloromethane
- CAS No. 75-09-2 • EC No. 200-838-9
- CH_2Cl_2 • FW 84.93

- Vapour pressure 475hPa(20℃) • Spec. density 1.33 g/cm³(20℃) • Explosive limit 13-22 Vol% • Solub.in H_2O 20g/l(20℃) • pH value (20℃) neutral • Saturation conc. 1549g/m³(20℃) • Melting point -95℃ • Boiling point 40℃ (1013hPa) • Evaporation number1.9 • Ignition temp. 605℃ (DIN51794)

- IMDG UN 1593 DICHLOROMETHANE, 6.1, III
- HS Code 2903 12 00 • RTECS PA8050000 • Merck Index 10, 5936

Methylene Chloride — ACS

Appearance ····· Claer
Assay(by GC) ····· Min 99.5%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 0.002%
Titrable acid ····· Max 0.0003meq/g
Free halogens ····· To pass test

Methylene Chloride — Bio

Ultraviolet Spectrophotometry
Maximum UV Absorbance
- 233nm ····· Max. 1.00
- 240nm ····· Max. 0.12
- 254nm ····· Max. 0.01

UV Cutoff ····· Max. 233nm
Chloride (Cl) ····· Max. 10ppm
Titrable acid ····· Max. 0.0003mEq/g
Assay (by GC) ····· Min. 99.9%
Color (APHA) ····· Max. 10
Water ····· Max. 30ppm
Residue after Evaporation ····· Max. 3ppm

Product No.	Packing	Price(₩)
597	4 ℓ	Call

Methylene Chloride — Extra Pure

Appearance ····· Clear, volatile liquid.
Assay (by GC) ····· Min 99.0%
Water ····· Max 0.2%
Residue after evaporation ····· Max 0.005%
Acidity (as HCl) ····· Max 0.02%
Free chlorine ····· To pass test
Iodine – consuming substances ····· To pass test
Substances darkened by sulfuri ····· To pass test

M

Product No.	Packing	Price(₩)
572	500g	5,000
573	1kg	8,800
574	24kg	43,800

Methylene Chloride GR

Appearance ····· Clear, volatile liquid.
Assay(by GC) ····· Min 99.5%
Color(APHA) ····· Max 10
Density (20℃) ····· 1.320 ~ 1.330 g/ml
Water ····· Max 0.05%
Residue after evaporation ····· Max 0.002%
Acidity (as HCl) ····· Max 0.01%
Free chlorine ····· To pass test
Iron (Fe) ····· Max 1ppm
Substances darkened by sulfuric acid ····· To pass test
Substances consumption iodine ····· To pass test
Stabilized with Amylene ····· Max 0.005%

Product No.	Packing	Price(₩)
571	1kg	9,400
3957	2.5ℓ	16,300
2972	4ℓ	25,500

Methylene Chloride HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
233 nm ····· Max 1.00
235 nm ····· Max 0.50
240 nm ····· Max 0.15
254 nm ····· Max 0.01
280 nm ····· Max 0.01
UV Cutoff ····· Max 233nm
Assay (by GC) ····· Max 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 2.0ppm
Preservative (Amylene) ····· 40 ~ 200ppm
Titratable Acid ····· Max 0.0003mEq/g
Free Halogens ····· To pass test

Product No.	Packing	Price(₩)
577	4ℓ	35,000

Methylene Chloride NF

Appearance ····· Clear, volatile liquid.
Specific gravity d 25/25 ····· 1.318 ~ 1.322
Water ····· Max 0.02%
Limit of hydrogen chloride ····· Max 0.001%
Limit of nonvolatile residue ····· Max 0.002%
Heavy Metals ····· Max 1ppm
Free chlorine ····· To pass test
Assay (by GC) ····· Min 99.0%

Product No.	Packing	Price(₩)
587	24kg	Call

Methylene Chloride PESTICIDE

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10ppt
Assay (by GC) ····· Min 99.7%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after Evaporation ····· Max 5ppm
Chloride (Cl) ····· Max 10ppm
Stabilized with 40~200ppm Amylene

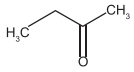
Product No.	Packing	Price(₩)
580	4ℓ	48,800

Methylene Chloride Ultimate

Extraction-Concentration Suitability
ECD Detectable residue (as Heptachlor epoxide) ····· Max 10ppt
FID Detectable residue (as 2-Octanol) ····· Max 5ppb
Ultraviolet Spectrophotometry
Maximum UV Absorbance
233 nm ····· Max 1.00
235 nm ····· Max 0.50
240 nm ····· Max 0.15
254 nm ····· Max 0.01
280 nm ····· Max 0.01
UV Cut-off ····· Max 233nm
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 1ppm
Fluorescence background ····· To pass test
Preservative (Amylene) ····· 40~200ppm
Titratable acide ····· Max 0.0003mEq/g
Free halogens ····· To pass test

Product No.	Packing	Price(₩)
1667	4ℓ	41,300

Methyl Ethyl Ketone



메틸에틸케톤, 2-Butanone, MEK
● CAS No. 78-93-3 ● EC No. 201-159-0
● $C_2H_5COCH_3$ ● FW 72.11

● Vapour pressure 105hPa(20℃) ● Spec. density 0.805g/cm³(20℃) ● Explosive limit 1.8-11.5Vol% ● Flash point -4℃(DIN51755) ● Solub.in H_2O 292g/l (20℃) ● pH value (20℃)neutral ● Melting point -86℃ ● Boiling point 79.6℃(1013hPa) ● Water absorption 1250g/kg(20℃) ● Ignition temp. 514℃(DIN51794)

● IMDG UN 1193 ETHYL METHYL KETONE, 3, II
● HS Code 2914 12 00 ● 4류 제1석유류 (비수용성 액체) 200ℓ
● Merck Index 10, 5946

Methyl Ethyl Ketone Extra Pure

Appearance ····· Colourless liquid,acetone similar smell.
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Density (20℃) ····· 0.803 ~ 0.807g/ml
Refractive index (n 20 D) ····· 1.378 ~ 1.381
Water ····· Max 0.3%
Residue after evaporation ····· Max 0.003%
Acidity (as CH_3COOH) ····· Max 0.005%
Substances reducing permanganate ····· To pass test
Substances not precipitated by H_2SO_4 ····· To pass test

Product No.	Packing	Price(₩)
606	500㎖	5,600
607	1ℓ	9,400
608	18ℓ	56,300

Methyl Ethyl Ketone GR

Product No.	Packing	Price(₩)
4732	2.5ℓ	18,800

M

Methyl Ethyl Ketone HPLC

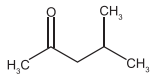
Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance

329 nm	Max 1.00
335 nm	Max 0.30
340 nm	Max 0.08
350 nm	Max 0.01
400 nm	Max 0.01
UV Cutoff	Max 329nm
Assay (by GC)	Min 99.6%
Color (APHA)	Max 10
Water	Max 0.03%
Residue after Evaporation	Max 3ppm
Titrable acid	Max 0.0005mEq/g
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
610	4 ℓ	52,500

Methyl 4-hydroxy benzoate → *go to Methyl Paraben*

Methyl Isobutyl Ketone



메틸이소뷰틸케톤, MIBK, 4-Methyl-2-Pentanone
● CAS No. 108-10-1 ● EC No. 203-550-1
● $(CH_3)_2CHCH_2COCH_3$ ● FW 100.16

● Vapour pressure 20hPa(20℃) ● Spec. density 0.80g/cm³(20℃) ● Explosive limit 1.2-8.0Vol% ● Flash point 14℃ ● Solub.in H_2O 18-20g/l(20℃) ● pH value (20℃)neutral ● Saturation conc. 82g/m³(20℃) ● Melting point -84℃ ● Boiling point 116-118℃(1013hPa) ● Ignition temp. 460℃

● IMDG UN 1245 ETHYL ISOBUTYL KETONE, 3, II
● HS Code 2914 13 00 ● 4류 제1석유류 (비수용성 액체) 200ℓ
● Merck Index 10, 5056

Methyl Isobutyl Ketone Extra Pure

Appearance	Colorless liquid.
Assay (by GC)	Min 98.5%
Solubility in ethanol	To pass test
Density (20℃)	0.800 ~ 0.805g/ml
Water	Max 0.3%
Residue after evaporation	Max 0.003%
Acidity (as CH_3COOH)	Max 0.005%
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
629	500㎖	5,600
631	1 ℓ	9,000
2203	200 ℓ	Call

Methyl Isobutyl Ketone GR

Appearance	Colourless liquid.
Assay (by GC)	Min 99.5%
Solubility in ethanol	To pass test
Density (20℃)	0.799 ~ 0.804g/ml
Refractive index (n 20 D)	1.394 ~ 1.397
Water	Max 0.1%
Residue after evaporation	Max 0.001%
Acidity (as CH_3COOH)	Max 0.01%
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
626	1 ℓ	8,800
1744	18 ℓ	75,000

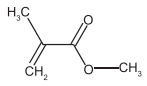
Methyl Isobutyl Ketone HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance

334 nm	Max 1.00
340 nm	Max 0.50
350 nm	Max 0.25
360 nm	Max 0.15
400 nm	Max 0.01
UV Cutoff	Max 334nm
Assay (by GC)	Min 99.0%
Color (APHA)	Max 10
Water	Max 0.05%
Residue after evaporation	Max 5ppm
Titrable Acid	Max 0.002mEq/g

Product No.	Packing	Price(₩)
634	4 ℓ	75,000

Methyl Methacrylate Extra Pure



메틸메타크릴레이트, Methyl-2-methylpropenoate
● CAS No. 80-62-6 ● EC No. 201-297-1
● $H_2C=C(CH_3)COOCH_3$ ● FW 100.12

● Vapour pressure 53hPa(20℃) ● Spec. density 0.94 g/cm³(20℃) ● Explosive limit 2.1-12.5Vol% ● Flash point 10℃(DIN51755) ● Solub.in H_2O 15g/l(20℃) ● Melting point -48℃ ● Boiling point 101℃ ● Ignition temp. 430℃ (DIN51794)

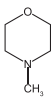
● IMDG UN 1247 METHYL METHACRYLATE MONOMER, STABILIZED, 3, II
● HS Code 2916 14 10 ● RTECS OZ5075000
● 4류 제1석유류 (비수용성 액체) 200ℓ ● Merck Index 5796

Appearance	Colorless, volatile liquid and has a pungent oder.
Color	Max 10APHA
Water	Max 0.05%
Density (20℃)	0.942 ~ 0.947g/ml
Acidity (as MAA)	Max 0.008%
Assay(by G,C)	99.8%

Product No.	Packing	Price(₩)
639	500㎖	8,100
640	1 ℓ	12,500

Methyl-2-methylpropenoate → *go to Methyl Methacrylate*

N-Methyl Morpholine CP



NMM, 메틸모포린
● CAS No. 109-02-4 ● EC No. 203-640-0
● $C_5H_{11}NO$ ● FW 101.15

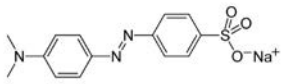
● Vapour pressure 30hPa(20℃) ● Spec. density 0.92 g/cm³(20℃) ● Explosive limit 2.2-11.8Vol% ● Flash point 12℃ c.c.(DIN51755) ● Solub.in H_2O(20℃) soluble ● pH value 10.6 (50g/l, H_2O, 20℃) ● Melting point -66℃ ● Boiling point 112-114℃ ● Ignition temp. 165℃ (DIN51794)

● IMDG UN 2535 4-METHYLMORPHOLINE, 3(8), II
● HS Code 2934 99 90 ● 4류 제1석유류 (수용성 액체) 200ℓ

Product No.	Packing	Price(₩)
2208	500g	27,000

M

Methyl Orange — Indicator



메틸오렌지, CI 13025, 4-Dimethylaminoazobnzene-4'-sufonic acid sodium
● CAS No. 547-58-0 ● EC No. 208-925-3
● $C_{14}H_{14}N_3NaO_3S$ ● FW 327.34

● Solub.in H_2O 5g/l(20℃) ● pH value ~6.5(5g/l, H_2O, 20℃) ● Melting point >300℃
● Bulk density ~200-400kg/m³

● IMDG UN 3144 TOXIC SOLID, ORGANIC, N.O.S.(METHYL ORANGE), 6.1, III
● HS Code 2927 00 00

Appearance ····· Green, brown black or pon·gee-green powder.
Solubility in water ····· To pass test
Absorbance(5mg/l, pH 4.8) ····· Min 0.33
Ignnition residue(as Sulfate)(after Dried) ····· 20.0 ~ 23.0%
pH range ····· 3.1(Yellow~Red) ~ 4.4(Red~Yellow)

Product No.	Packing	Price(₩)
650	25g	6,500

Methyl Orange Solution — Indicator solution

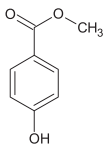
Product No.	Packing	Price(₩)
653	500㎖	11,300

Methyl Orange xylene cyanol Solution — Indicator solution

Product No.	Packing	Price(₩)
3743	500㎖	11,300

Methyl 3-oxobutanoate → *go to Methyl Acetoacetate*

Methyl Paraben — Extra Pure



메틸파라벤, Methy 4-hydroxy benzoate
● CAS No. 99-76-3 ● EC No. 202-785-7
● $C_8H_8O_3$ ● FW 152.15

● Vapour pressure 0.000005hPa(20℃) ● Spec. density 2.5g/cm³(25℃) ● pH value ~5.8(20℃) (saturated solution) ● Melting point 125-128℃ ● Bulk density ~300-400kg/m³ ● Ignition temp. >600℃

● IMDG No Dangerous Good
● HS Code 2918 29 30 ● RTECS DH2450000

Appearance ····· Colorless – white crystal or crystalline powder
Assay (after dried) ····· Min 99.0%
Melting point ····· 125 ~ 128℃
Loss on drying ····· Max 0.5%
Ignition residue (as Sulfate) ····· Max 0.1%
Chloride (Cl) ····· Max 0.035%
Sulfate (SO_4) ····· Max 0.024%
Heavy metals (as Pb) ····· Max 0.002%
Salicylic acid ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
617	25g	5,300
619	500g	19,500

2-Methyl-2,4-pentanediol → *go to Hexylene Glycol*

2-Methyl-1-propanol → *go to Iso-Butyl Alcohol*

Methyl propenoate → *go to Methyl Acrylate monomer*

2-Methylpropenoic acid → *go to Methacrylic acid*

N-Methyl-2-Pyrrolidone

메틸피롤리돈,1-Methyl-2-Pyrrolidone, NMP
● CAS No. 872-50-4 ● EC No. 212-828-1
● C_5H_9NO ● FW 99.13

● Vapour pressure 0.32hPa(20℃) ● Spec. density 1.03 g/cm³(20℃) ● Explosive limit 1.3-9.5Vol% ● Flash point 91℃ c.c. ● Solub. in H_2O 1000g/l(25℃) ● pH value 8.5-10.0(100g/l, H_2O, 20℃) ● Melting point -24℃ ● Boiling point 202℃ ● Ignition temp. 245℃

● IMDG No Dangerous Good ● HS Code 2933 79 00
● RTECS UY5490000 ● 4류 제3석유류 (수용성 액체) 4000ℓ

N-Methyl-2-Pyrrolidone — Bio

Ultraviolet Spectrophotometry
Maximum UV Absorbance
285 nm ····· Max 1.00
300 nm ····· Max 0.50
325 nm ····· Max 0.10
350 nm ····· Max 0.03
400 nm ····· Max 0.01
UV Cutoff ····· Max 285nm
Amines (as Diethylamine) ····· Max 5ppm
Assay (by GC) ····· Min 99.5%
Color (APHA) ····· Max 10
Water ····· Max 200ppm
Residue after evaporation ····· Max 10ppm

Product No.	Packing	Price(₩)
2220	4ℓ	Call

M

N-Methyl-2-Pyrrolidone EL

Assay ····· Min 99.5%
Color ····· Max 20APHA
Water ····· Max 0.05%
Free amines (as CH_3NH_2) ····· Max 50ppm
Chloride (Cl) ····· Max 0.5ppm
Phosphate (PO_4) ····· Max 1ppm
Aluminum (Al) ····· Max 100ppb
Arsenic (As) ····· Max 100ppb
Barium (Ba) ····· Max 100ppb
Boron (B) ····· Max 100ppb
Cadmium (Cd) ····· Max 100ppb
Calcium (Ca) ····· Max 300ppb
Chromium (Cr) ····· Max 100ppb
Cobalt (Co) ····· Max 100ppb
Copper (Cu) ····· Max 100ppb
Gallium (Ga) ····· Max 100ppb
Germanium (Ge) ····· Max 100ppb
Gold (Au) ····· Max 100ppb
Lead (Pb) ····· Max 100ppb
Lithium (Li) ····· Max 100ppb
Magnesium (Mg) ····· Max 100ppb
Manganese (Mn) ····· Max 100ppb
Nickel (Ni) ····· Max 100ppb
Potassium (K) ····· Max 100ppb
Silver (Ag) ····· Max 100ppb
Sodium (Na) ····· Max 300ppb
Strontium(Sr) ····· Max 100ppb
Tin(Sn) ····· Max 100ppb
Titanium(Ti) ····· Max 100ppb
Zinc (Zn) ····· Max 100ppb
Particle Count (0.5 micron and above) ····· Max 100pcs/ml

Product No.	Packing	Price(₩)
2217	3.8 ℓ	81,300

N-Methyl-2-Pyrrolidone ELH

Assay ····· Min 99.8%
Color ····· Max 30APHA
Water ····· Max 0.03%
Free amines (as CH_3NH_2) ····· Max 50ppm
Chloride (Cl) ····· Max 0.5ppm
Phosphate (PO_4) ····· Max 1ppm
Aluminum (Al) ····· Max 10ppb
Arsenic (As) ····· Max 10ppb
Barium (Ba) ····· Max 10ppb
Boron (B) ····· Max 10ppb
Cadmium (Cd) ····· Max 10ppb
Calcium (Ca) ····· Max 10ppb
Chromium (Cr) ····· Max 10ppb
Cobalt (Co) ····· Max 10ppb
Copper (Cu) ····· Max 10ppb
Gallium (Ga) ····· Max 10ppb
Germanium (Ge) ····· Max 10ppb
Gold (Au) ····· Max 10ppb
Lead (Pb) ····· Max 10ppb
Lithium (Li) ····· Max 10ppb
Magnesium (Mg) ····· Max 10ppb
Manganese (Mn) ····· Max 10ppb
Nickel (Ni) ····· Max 10ppb
Potassium (K) ····· Max 10ppb
Silver (Ag) ····· Max 10ppb
Sodium (Na) ····· Max 10ppb
Strontium(Sr) ····· Max 10ppb
Tin(Sn) ····· Max 10ppb
Titanium(Ti) ····· Max 10ppb
Zinc (Zn) ····· Max 10ppb
Particle Count (0.5 micron and above) ····· Max 100pcs/ml

N-Methyl-2-Pyrrolidone Extra Pure

Appearance ····· Colorless~yellow liquid has a characteristic smell.
Assay (by GC) ····· Min 99.0%
Color ····· Max 50APHA
Density (25℃) ····· 1.024 ~ 1.028g/ml
Water ····· Max 0.2%

Product No.	Packing	Price(₩)
670	1kg	20,000
2216	18 ℓ	237,500

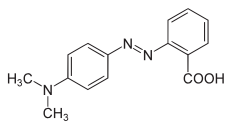
N-Methyl-2-Pyrrolidone HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
285 nm ····· Max 1.00
300 nm ····· Max 0.50
325 nm ····· Max 0.10
350 nm ····· Max 0.03
400 nm ····· Max 0.01
UV Cutoff ····· Max 285nm
Assay (by GC) ····· Min 99.7%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 10ppm
Free Amines (as CH_3NH_2) ····· Max 0.01%
Chloride (Cl) ····· Max 1ppm

Product No.	Packing	Price(₩)
674	4 ℓ	100,000

1-Methyl-2-pyrrolidone → *go to N-Methyl-2-Pyrrolidone*

Methyl Red Indicator



메틸레드, 2-[(4-Dimethlamino)phenylazo] benzoic acid sodium salt, C.I. 13020
● CAS No. 493-52-7 ● EC No. 207-776-1
● $C_{15}H_{15}N_3O_2$ ● FW 269.31

● Solub.in H_2O (20℃) slightly soluble ● Melting point 178-182℃ ● Bulk density ~300-500kg/m³

● IMDG No Dangerous Good
● HS Code 2927 00 00

Appearance ····· Red Purple~dark purple crystals or crystalline powder.
Solubility in ethanol ····· To pass test
Solubility in NaOH Solution ····· To pass test
Absorbance(5mg/l, pH 6.6) ····· Min 0.35
Loss on drying (at.105℃,4hr.) ····· Max 1.0%
Ignition residue (as Sulfate) ····· Max 0.2%
pH range ····· 4.2(적자색) ~ 6.2(황색)

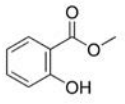
Product No.	Packing	Price(₩)
1505	25g	9,400

Methyl Red Solution Indicator solution

Product No.	Packing	Price(₩)
1506	500㎖	12,000

M

Methyl Salicylate — Extra Pure



살리실산메틸(동녹유)
● CAS No. 119-36-8 ● EC No. 204-317-7
● $C_8H_8O_3$ ● FW 152.16

● Vapour pressure ~0.13hPa(20℃) ● Spec. density 1.184 g/cm³(20℃) ● Flash point 99℃ c.c. ● Solub.in H_2O 0.74g/l(30℃) ● Melting point -8℃ ● Boiling point 220-224℃(1013hPa) ● Ignition temp. 475℃

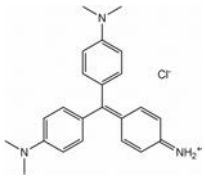
● IMDG No Dangerous Good
● HS Code 2918 23 10 ● RTECS VO4725000 ● Merck Index 10, 5994

Appearance ····· Colorless or yellowish oily liquid. Unusual smell.
Assay ····· Min 98.0%
Solubility in ethanol ····· To pass test
Solubility in KOH ····· To pass test
Density (20℃) ····· 1.162 ~ 1.192g/ml
Boiling range(221 ~ 225℃) ····· 221 ~ 225vol%
Acidity (as HOC_6H_4COOH) ····· Max 0.1
Heavy metals (as Pb) ····· To pass test%

Product No.	Packing	Price(₩)
613	500g	12,500

7-Methyltheobromine → *go to Caffeine anhydrous*

Methyl Violet 2B — Indicator



메틸바이오렛2B, C.I. 42535
● CAS No. 8004-87-3 ● EC No. 208-953-6
● $C_{24}H_{28}ClN_3$ ● FW 393.96

● Solub.in H_2O 30g/l(25℃) ● pH value ~4.3(10g/l, H_2O, 25℃) ● Melting point 137℃ (decomposition) ● Bulk density ~380kg/m³

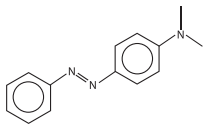
● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METHYL VIOLET), 9, III
● HS Code 3204 13 00 ● RTECS BO9000000

Product No.	Packing	Price(₩)
1507	25g	6,300

Methyl Violet 2B Solution — Indicator solution

Product No.	Packing	Price(₩)
3862	500㎖	11,400

Methyl Yellow — Indicator



Dimethyl Yellow, C.I 11020
● CAS No. 60-11-7 ● EC No. 200-455-7
● $C_{14}H_{15}N_3$ ● FW 225.29

● Solub.in H_2O practically insoluble ● pH value 5 ~ 7 (10 g/ℓ, H2O, 20℃) ● Melting point 110~116℃ (decomposition)

● IMDG UN2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, III
● HS Code 2927 00 00

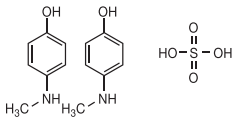
Product No.	Packing	Price(₩)
1509	25g	Call

Methyl Yellow Soution — Indicator solution

Product No.	Packing	Price(₩)
1508	500㎖	12,500

Metol — Extra Pure

NEW



메톨, 4-Methylaminophenol sulfate
● CAS No. 55-55-0
● $C_{14}H_{20}N_2O_6S$ ● FW 344.39

● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III
● HS Code 2922 29 00

Product No.	Packing	Price(₩)
5182	25g	15,500

MIBK → *go to Methyl Isobutyl Ketone*

Molecular sieve 13X — CP

모레큘라시브

Product No.	Packing	Price(₩)
1513	500g	30,000

Molecular sieve 3A — CP

모레큘라시브
● CAS No. 55465-40-4

Product No.	Packing	Price(₩)
1510	500g	18,800

Molecular sieve 4A — CP

모레큘라시브
● CAS No. 70955-01-0

Product No.	Packing	Price(₩)
2799	500g	18,800

Molecular sieve 4A 4×8 — CP

모레큘라시브

Product No.	Packing	Price(₩)
1511	500g	18,800

Molecular sieve 5A — CP

모레큘라시브
● CAS No. 55465-40-4

Product No.	Packing	Price(₩)
2801	500g	20,000

M

Molybdenum Disulfide

이황화몰리브덴, Molybdenum (Ⅳ) Sulfide
● CAS No. 1317-33-5 ● EC No. 215-263-9
● MoS_2 ● FW 160.06

● Solub.in H_2O (20℃) insoluble ● pH value 5-8(100g/l, H_2O, 20℃)(suspension)
● Melting point 2375℃ ● Bulk density ~500kg/m³

● IMDG No Dangerous Good
● HS Code 2830 90 85 ● Merck Index 10, 6089

Silicate (SiO_2) ····· Max 0.1%
Iron (Fe) ····· Max 0.2%
Water ····· Max 0.2%
Oil ····· Max 0.2%
Assay ····· Min 98.0%

Molybdenum Disulfide CP

Product No.	Packing	Price(₩)
1515	500g	75,000

Molybdenum Disulfide Extra Pure

Product No.	Packing	Price(₩)
2225	500g	75,000

Molybdenum(VI) Oxide Extra Pure

산화몰리브덴, Molybdenum Trioxide
● CAS No. 1313-27-5 ● EC No. 215-204-7
● MoO_3 ● FW 143.94

● Vapour pressure 133.3hPa (955℃) ● Spec. density 4.5g/cm3 (20℃) ● Solub.in H_2O 0.5g/l(20℃) ● Melting point 795℃ ● Bulk Density 1200 kg/m³ ● Boiling point 1155℃

● IMDG UN3288 TOXIC SOLID, INORGANIC, N.O.S., 6.1, I
● HS Code 2825 70 00 ● RTECS QA4725000

Product No.	Packing	Price(₩)
4036	500g	135,000
4271	25kg	Call

Molybdenum(Ⅳ) sulfide → *go to Molybdenum Disulfide*

Molybdenum trioxide → *go to Molybdenum(VI) Oxide*

NEW

Molybdic Acid 85% GR / ACS

몰리브덴산
● CAS No. 7782-91-4 ● EC No. 231-970-5
● H_2MoO_4 ● FW 161.95

● Solub. in H_2O (20 ℃) insoluble ● Melting point 300 ℃ ● Bulk density ~ 980 kg/m³

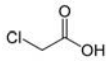
● IMDG NO Dangerous Good ● HS Code 2825 70 00
● RTECS XO8590000 ● Merck Index 10, 6094

Assay (by GC) ····· White crystalline powder.
Assay ····· Min 85.0%
Chloride (Cl) ····· Max 0.002%
Phosphate (PO_4) ····· Max 0.001%
Sulfate (SO_4) ····· Max 0.02%
Heavy metals (as Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.004%

Product No.	Packing	Price(₩)
5074	25g	16,300

12 Molybdo(VI) phosphoric Acid n-Hydrate
→ *go to Phosphomolybdic acid*

Monochloroacetic Acid Extra Pure



모노클로로아세트산, Chloroacetic Acid
● CAS No. 79-11-8 ● EC No. 201-178-4
● $ClCH_2COOH$ ● FW 94.50

● Vapour pressure 1hPa(20℃) ● Spec. density 1.32 g/cm³(40℃) ● Explosive limit 8.0Vol% ● Flash point 126℃c.c.(DIN51758) ● Solub.in H_2O 4210g/l(20℃) ● pH value <1 (800g/l, H_2O, 20℃) ● Melting point 62℃ ● Bulk density ~800kg/m³ ● Boiling point 189℃(1013hPa) ● Ignition temp. 460℃(DIN51794)

● IMDG UN 1751 CHLOROACETIC ACID, SOLID, 6.1(8), II
● HS Code 2915 40 00 ● Merck Index 10, 2078

Appearance ····· White crystal.
Assay ····· Min. 99.0%
Solubility in water ····· To pass test
Melting point ····· 62.0 ~ 64.0℃
Ignition residue (as Sulfate) ····· Max. 0.05%
Chloride (Cl) ····· Max. 0.003%
Sulfate (SO_4) ····· Max. 0.005%
Heavy matals (as Pb) ····· Max. 0.0005%
Iron (Fe) ····· Max. 0.0001%
Substances darkened by H_2SO_4 ····· To pass test%

Product No.	Packing	Price(₩)
1261	500g	9,400

Monochlorobenzene

모노클로로벤젠, Phenyl chloride
● CAS No. 108-90-7 ● EC No. 203-628-5
● C_6H_5Cl ● FW 112.56

● Vapour pressure 12hPa(20℃) ● Spec. density 1.11 g/cm³(20℃) ● Explosive limit 1.3-11Vol% ● Flash point 27℃(DIN51755) ● Solub.in H_2O 0.4g/l(20℃) ● pH value (20℃)neutral ● Saturation conc. 54g/m³(20℃) ● Melting point -45℃ ● Boiling point 132℃(1013hPa) ● Ignition temp. 590℃

● IMDG UN 1134 CHLOROBENZENE, 3, III
● HS Code 2903 61 00 ● 4류 제2석유류 (비수용성 액체) 1000ℓ
● Merck Index 10, 2090

Monochlorobenzene Extra Pure

Assay (by GC) ····· Min 99.5%
Specific gravity (at 20/20 ℃) ····· 1.106 ~ 1.111℃
Water ····· Max 0.05%
Residue after evaporation ····· Max 0.003%
Acidity ····· To pass test%
Chloride (Cl) ····· Max 0.0005%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
2226	500g	7,000
1262	1kg	11,900
3500	20kg	110,000

M

Monochlorobenzene GR

Product No.	Packing	Price(₩)
4247	2.5 ℓ	23,500
5241	4 ℓ	35,600

Monochlorobenzene HPLC

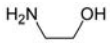
Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance

- 288 nm ····· Max 1.00
- 300 nm ····· Max 0.05
- 325 nm ····· Max 0.04
- 350 nm ····· Max 0.02
- 400 nm ····· Max 0.01
- UV Cutoff ····· Max 288nm

Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 30
Water ····· Max 0.03%
Residue after evaporation ····· Max 5ppm
Titrable acid ····· Max 0.004mEq/g

Product No.	Packing	Price(₩)
2229	4 ℓ	100,000

Monoethanolamine



모노에탄올아민, 2-Aminoethanol
● CAS No. 141-43-5 ● EC No. 205-483-3
● $NH_2CH_2CH_2OH$ ● FW 61.08

● Vapour pressure 0.5hPa(20℃) ● Spec. density 1.02 g/cm³(20℃) ● Explosive limit 3.4-27Vol% ● Flash point 92.5℃(DIN51758) ● Solub.in H_2O (20℃)soluble ● pH value 12.1(100g/l, H_2O, 20℃) ● Melting point 10.5℃ ● Boiling point 171℃(1013hPa) ● Kin. viscosity 20(23℃) ● Ignition temp. 410℃(DIN51794)

● IMDG UN 2491 ETHANOLAMINE, 8, III
● HS Code 2922 11 00 ● RTECS KJ5775000
● 4류 제3석유류 (수용성 액체) 4000ℓ
● Merck Index 10, 3675

Monoethanolamine EL

Assay ····· Min 99.5%
Color(APHA) ····· Max 10
Water ····· Max 0.3%
Diethanolamine ····· Max 0.3%
Triehtanolamine ····· Max 0.1%
Chloride (Cl) ····· Max 1ppm
Aluminum (Al) ····· Max 30ppb
Calcium (Ca) ····· Max 30ppb
Copper (Cu) ····· Max 30ppb
Iron (Fe) ····· Max 30ppb
Magnesium (Mg) ····· Max 30ppb
Manganese (Mn) ····· Max 30ppb
Nickel (Ni) ····· Max 30ppb
Potassium (K) ····· Max 30ppb
Sodium (Na) ····· Max 30ppb
Zinc (Zn) ····· Max 30ppb

Product No.	Packing	Price(₩)
2231	3.8 ℓ	Call

Monoethanolamine Extra Pure

Appearance ····· Colorless~pale yellow Viscosity Liquid.
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Refractive index (n 20 D) ····· 1.452 ~ 1.457
Water ····· Max 0.5%
Ignition residue (as Sulfate) ····· Max 0.05%

Product No.	Packing	Price(₩)
1517	500g	5,500
1518	1kg	9,400
1519	18kg	100,000

Mononitromethane → *go to Nitromethane*

Morpholine GR

모폴린, Tetrahydro-1,4-oxazine
● CAS No. 110-91-8 ● EC No. 203-815-1
● C_4H_9NO ● FW 87.12

● Vapour pressure 11hPa(20℃) ● Spec. density 1.00 g/cm³(20℃) ● Explosive limit 1.4-15.2Vol% ● Flash point 31℃ c.c. ● Solub.in H_2O (20℃)soluble ● pH value 11.2neutral ● Saturation conc. 38g/m³(20℃) ● Melting point -5℃ ● Boiling point 129℃(1013hPa) ● Kin. viscosity 2.2(20℃) ● Ignition temp. 275℃

● IMDG UN 2054 MORPHOLINE, 8 (3), I
● HS Code 2934 99 90 ● RTECS QD6475000 ● Merck Index 10, 6137

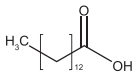
Assay ····· 99.0 ~ 100.5%
Density (20℃) ····· 1.001 ~1.006g/ml
Solubility in water ····· To pass test
Water ····· Max 0.7%
Residue after evaporation ····· Max 0.05%

Product No.	Packing	Price(₩)
1520	1 ℓ	16,300

MTBE → *go to Methyl tert-Butyl Ether*

Murexide → *go to Ammonium Purpurate*

Myristic Acid GR



미리스트산, Tetradecanoic acid
● CAS No. 544-63-8 ● EC No. 208-875-2
● $CH_3(CH_2)_{12}COOH$ ● FW 228.38

● Vapour pressure <0.01hPa(20℃) ● Flash point >165℃ ● Solub.in H_2O (20℃)insoluble ● Melting point 52-56℃ ● Boiling point 250℃(133hPa)

● IMDG No Dangerous Good
● HS Code 2915 90 00 ● Merck Index 10, 6183

Appearance ····· White flakes, granules or lumps form crystalline solids. Has an unusual odor.
Melting point ····· 45 ~ 56℃
Acid value ····· 240 ~ 250
Iodine value ····· Max 1
Mineral oil and foreign fatty oils ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.1%

Product No.	Packing	Price(₩)
1521	25g	5,300
1522	500g	30,000

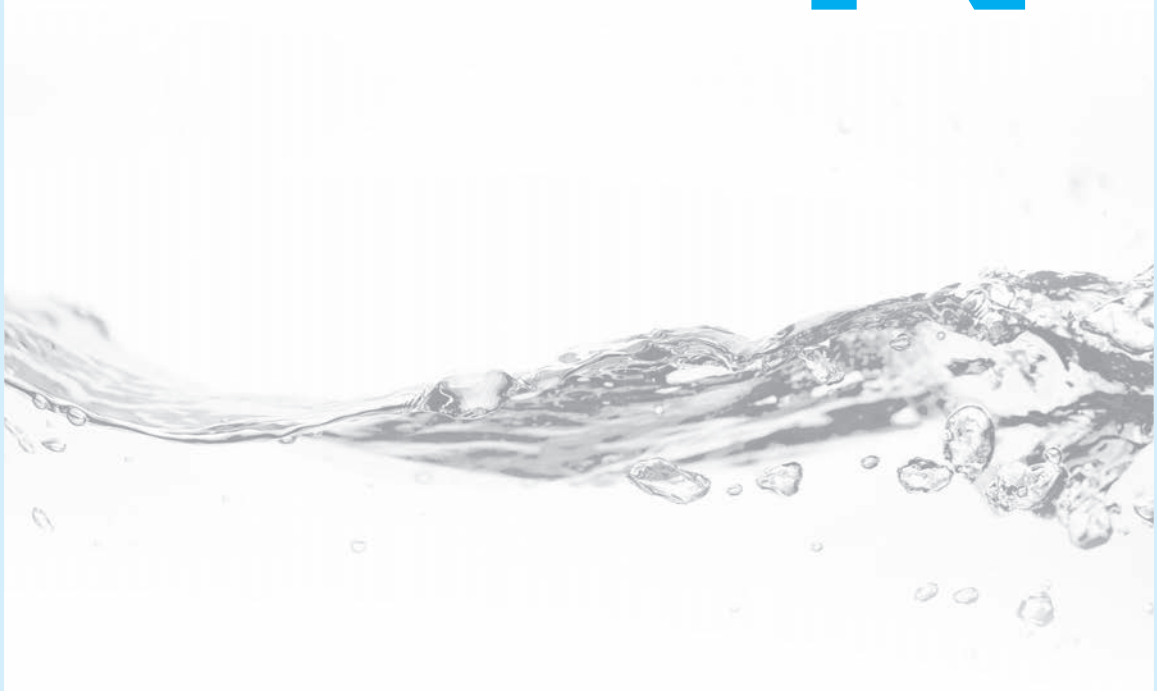
M

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

N



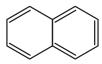
N

Alphabetical list Numbers

List of N

Product	Page
Naphthalene	201
1–Naphthol	201
2–Naphthol	201
1–Naphthylacetic Acid	201
N–(1–Naphthyl)ethylenediamine dihydrochloride	201
Nessler's solution	201
Neutral red	201
Nickel Acetate tetrahydrate	202
Nickel Carbonate basic	202
Nickel Chloride hexahydrate	202
Nickel Oxide	202
Nickel Sulfamate tetrahydrate	202
Nickel Sulfate hexahydrate	202
Nickel(II) amidosulfate tetrahydrate	202
Nickel(II) Formate Dihydrate	202
Nickel(II) Nitrate hexahydrate	202
Nicotinamide	203
Nicotinic acid	203
Ninhydrine	203
Nitric Acid	203
Nitric Acid 70%	204
1N – Nitric Acid (1M)	204
N/10 – Nitric Acid (0.1M)	205
Nitric acid ammonia	205
Nitric acid potassium salt	205
Nitric acid sodium salt	205
o–Nitroaniline	205
2–Nitroaniline	205
Nitrilotriacetic Acid	205
4–Nitroaniline	205
Nitrobenzene	205
3–Nitrobenzaldehyde	205
p–Nitrochlorobenzene	205
Nitromethane	205
p–Nitrophenol	206
4–Nitrophenol	206
Nitroso–R–Salt	206
NMP	206

Naphthalene — Extra Pure



나프탈렌
- CAS No. 91-20-3 • EC No. 202-049-5
- $C_{10}H_8$ • FW 128.16

- Vapour pressure 0.08hPa(20℃) • Spec. density 1.15 g/cm³(20℃) • Explosive limit 0.9-5.9Vol%
- Flash point 80℃c.c. • Solub.in H_2O 0.03g/l(25℃)
- Melting point 79-82℃ • Bulk density 600kg/m³
- Boiling point 218℃ • Ignition temp. 540℃

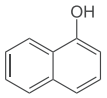
- IMDG UN 1334 NAPHTHALENE, REFINED, 4.1, III
- HS Code 2902 90 10 • RTECS QJ0525000 • Merck Index 10, 6183

Appearance ····· Colorless & leaflike or glossy rod-shape crystal.
Freezing point ····· Min 79.5℃
Solubility in ethanol ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.1%
Free Acid ····· To pass test
Insoluble dilute phenol ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
1523	500g	7,000

NEW

1-Naphthol — Extra Pure / AR



1-나프톨, 1-Hydroxynaphthalene
- CAS No. 90-15-3 • EC No. 201-969-4
- $C_{10}H_8O$ • FW 144.17

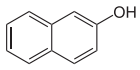
- Vapour pressure 1.3hPa (94℃) • Spec. density 1.1 g/cm³ (20℃) • Bulk density ~ 450 kg/m³ • Flash point 125℃ • Solub.in H_2O 0.1 g/l (20℃) • Saturation conc. 2 g/m³ • Melting point 94 -96 ℃ • Boiling point ~288 ℃ • Ignition temp. 510℃

- IMDG UN 2811 TOXIC SOLID, ORGANIC, N.O.S.(1-NAPHTHOL), 6.1, III
- HS Code 2907 15 10 • RTECS QL2800000 • Merck Index 10, 6234

Appearance ····· Off-White brownish flakes.
Assay (by GC) ····· Min 98.0%
Melting point ····· 94~96℃
Ignition residue (as Sulfate) ····· Max 0.05%

Product No.	Packing	Price(₩)
5060	25g	5,000

2-Naphthol — Extra Pure



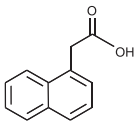
2-Hydroxynaphthalene
- CAS No. 135-19-3 • EC No. 205-182-7
- $C_{10}H_8O$

- Vapour pressure <0.1 hPa(30℃) • Spec. density 1.27 g/cm³(20℃) • Flash point 153℃ c.c.
- Solub.in H_2O 1g/l(20℃) • Melting point 121.6℃
- Bulk density ~300kg/m³ • Boiling point 285℃
- Ignition temp. 540℃

- IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S.(2-NAPHTHOL), 9, III
- HS Code 2907 15 90 • Merck Index 10, 6235

Product No.	Packing	Price(₩)
4317	500g	12,500

1-Naphthylacetic Acid — Extra Pure



1-나프틸아세트산, Celmone
- CAS No. 86-87-3 • EC No. 201-705-8
- $C_{12}H_{10}O_2$ • FW 186.21

- Bulk density ~ 240 kg/m³ • Solub.in H_2O 0.42 g/l (20℃) • Melting point 129 -131 ℃ • pH value 3.0 (0.6 g/l, H_2O, 25 ℃)

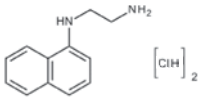
- IMDG NO Dangerous Good • HS Code 2916 39 00
- Merck Index 10, 6221

Product No.	Packing	Price(₩)
5183	25g	16,300

NEW

N-(1-Naphthyl)ethylenediamine dihydrochloride — GR / AR / ACS

NEW



N-1-나프틸에틸렌디아민이염산염
- CAS No. 1465-25-4 • EC No. 200-460-4
- $C_{12}H_{16}Cl_2N_2$ • FW 259.18

- Solub. in H_2O 30 g/l (20 ℃) • pH value ~ 1.0 (25 g/l, H_2O, 20 ℃) • Bulk density ~ 380 kg/m³

- IMDG NO Dangerous Good • HS Code 2921 59 90
- RTECS KV5330000

Appearance ····· White to almost white powder becoming pink on exposure to light IR Spectormetry.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Sensitivity ····· To pass test
Water ····· Max 5%

Product No.	Packing	Price(₩)
4942	25g	105,000

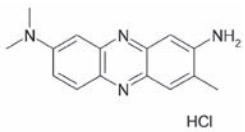
Nessler's solution — Indicator solution

네슬러시약
- CAS No. 7783-33-7

Product No.	Packing	Price(₩)
1524	500㎖	12,500

Neutral red — Indicator

NEW



뉴트랄 레드, Toluylene Red, Basic Red 5, C.I. 50040
- CAS No. 553-24-2 • EC No. 209-035-8
- $C_{15}H_{17}ClN_4$ • FW 288.78

- Solub.in H_2O 50g/l(25℃)
- pH value ~3.1(10g/l, H_2O, 20℃)
- Bulk density ~350-500kg/m³

- IMDG No Dangerous Good
- HS Code 3204 13 00

Appearance ····· Black crystal or powder with dark greenish brown color.
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Loss on drying (at.105℃,4hr.) ····· Max 10.0%
Ignition residue (as Sulfate) ····· Max 0.5%
pH range ····· 6.8(red) ~ 8.0(yellow)
Sensitivity ····· To pass test

Product No.	Packing	Price(₩)
1525	25g	22,500

N

Nickel Acetate tetrahydrate — Extra Pure

아세트산니켈
- CAS No. 6018-89-9
- $(CH_3COO)Ni \cdot 4H_2O$ • FW 248.84

Product No.	Packing	Price(₩)
1526	500g	30,000

Nickel Carbonate basic — CP

염기성 탄산니켈
- CAS No. 39430-27-8
- approx: $NiCO_3 \cdot 2Ni(OH)_2 \cdot 4H_2O$ • FW 376.18

Product No.	Packing	Price(₩)
1529	500g	37,500

Nickel Chloride hexahydrate — Extra Pure

염화니켈
- CAS No. 7791-20-0 • EC No. 231-743-0
- $NiCl_2 \cdot 6H_2O$ • FW 237.70

- Spec. density 1.92 g/cm³(55℃) • Solub.in H_2O 2540g/l(20℃) • pH value ~4.9(100g/l, H_2O, 20℃) • Melting point 1001℃(anhydrous substance) decomposes • Bulk density ~640kg/m³

- IMDG UN 3288 TOXIC SOLID, INORGANIC, N.O.S (NICKEL(II)-CHLORIDE), 6.1, III
- HS Code 2827 35 00 • Merck Index 10, 6343

Appearance ····· Green crystal.
Assay ····· Min 96.0%
Solubility in dil. HCl ····· To pass test
Nitrate ····· To pass test
Sulfate (SO_4) ····· Max 0.05%
Copper (Cu) ····· Max 0.02%
Cobalt (Co) ····· Max 0.3%
Iron (Fe) ····· Max 0.02%

Product No.	Packing	Price(₩)
1527	500g	16,300
3930	1kg	30,000

Nickel Oxide — CP

산화니켈
- CAS No. 1313-99-1 • EC No. 215-215-7
- NiOO • FW 74.71

- Spec. density 4.6-6.67 g/cm³(20℃) • Solub.in H_2O (20℃) insoluble • Melting point 1990℃ • Bulk density ~600kg/m³

- IMDG No Dangerous Good
- HS Code 2825 40 00 • RTECS QR8400000

Appearance ····· Pale green powder.
Assay (as Ni) ····· Min. 70.0%
Copper (Cu) ····· Max. 0.05%
Cobalt (Co) ····· Max. 0.1%
Iron (Fe) ····· Max. 0.2%

Product No.	Packing	Price(₩)
1532	500g	60,000

Nickel Sulfamate tetrahydrate — Extra Pure

설파민산니켈, Nickel(II) Amidosulfate tetrahydrate
- CAS No. 124594-15-6
- $Ni(NH_2SO_3)_2 \cdot 4H_2O$ • FW 322.91

Assay ····· Min 97.0%
Solubility in water ····· To pass test
pH(5%) ····· Min 3.0
Copper (Cu) ····· Max 0.001%
Zinc (Zn) ····· Max 0.001%
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
1657	500g	30,000

Nickel Sulfate hexahydrate — Extra Pure

황산니켈
- CAS No. 10101-97-0 • EC No. 232-104-9
- $NiSO_4$ $6H_2O$ • FW 262.86

- Spec. density 2.07 g/cm³(20℃) • Solub.in H_2O 650g/l(20℃) • pH value 4.3-4.7(100g/l, H_2O, 20℃) • Bulk density ~1000kg/m³

- IMDG UN 3288 TOXIC SOLID, INORGANIC, N.O.S. (NICKEL(II)-SULFATE), 6.1, III
- HS Code 2833 24 00 • Merck Index 10, 6355

Appearance ····· Green crystal or crystalline powder, efflorescence.
Assay (as $NiSO_4$ $6H_2O$) ····· Min 98.5%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.006%
Copper (Cu) ····· Max 0.02%
Cobalt (Co) ····· Max 0.03%
Iron (Fe) ····· Max 0.01%

Product No.	Packing	Price(₩)
1533	500g	16,300
2242	1kg	30,000

Nickel(II) amidosulfate tetrahydrate
→ *go to Nickel Sulfamate tetrahydrate*

Nickel(II) Formate Dihydrate — CP

개미산니켈
- CAS No. 3349-06-2
- $(CHCOO)_2Ni \cdot 2H_2O$ • FW 184.76

Product No.	Packing	Price(₩)
1530	25g	8,400

Nickel(II) Nitrate hexahydrate — Extra Pure

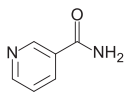
질산니켈
- CAS No. 13478-00-7 • EC No. 236-068-5
- $Ni(NO_3)_2 \cdot 6H_2O$ • FW 290.81

- Spec. density 2.05 g/cm³(20℃) • Solub.in H_2O 940g/l(20℃) • Melting point 56.7℃ • Bulk density ~800kg/m³ • Boiling point 136.7℃(1013hPa)

● IMDG UN 2725 NICKEL NITRATE, 5.1, III
● HS Code 2834 29 20 ● Merck Index 10, 6351

Product No.	Packing	Price(₩)
1531	500g	24,000

Nicotinamide — Extra Pure



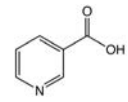
니코틴아미드, 3-Pyridine carboxamide
● CAS No. 98-92-0 ● EC No. 202-713-4
● $C_6H_6N_2O$ ● FW 122.13

● Spec. density 1.40 g/cm³(20℃) ● Flash point 182℃ ● Solub.in H_2O 691g/l(20℃) ● pH value 6.0-7.5 (50g/l, H_2O, 20℃) ● Melting point 128-131℃(sublimed) ● Bulk density ~360kg/m³ ● Boiling point 150-160℃(0.0007hPa) ● Ignition temp. 480℃

● IMDG No Dangerous Good
● HS Code 2936 29 90 ● RTECS QS3675000

Product No.	Packing	Price(₩)
879	25g	5,500
880	500g	56,000

Nicotinic acid — Extra Pure



니코틴산, Pyridine-3-carboxylic acid
● CAS No. 59-67-6 ● EC No. 200-441-0
● $C_6H_5NO_2$ ● FW 123.11

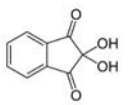
● Spec. density 1.47 g/cm³(20℃) ● Flash point 193℃ ● Solub.in H_2O 18g/l(20℃) ● pH value 2.7 (18g/l, H_2O, 20℃) ● Melting point 236.6℃ ● Bulk density 500-600kg/m³ ● Ignition temp. >365℃(dust)

● IMDG No Dangerous Good
● HS Code 2936 29 90 ● Merck Index 10, 6366

Appearance ····· White crystal or crystalline powder.
Assay (after dried) ····· Min 99.0%
Solubility in water ····· To pass test
pH ····· 3.0 ~ 4.0
Melting point ····· 234 ~ 238℃
Loss on drying (105 ℃) ····· Max 0.5%
Ignition residue (as Sulfate) ····· Max 0.1%
Chloride (Cl) ····· Max 0.021%
Sulfate (SO_4) ····· Max 0.019%
Heavy Metals (as Pb) ····· Max 20ppm
Nitro compounds ····· To pass test

Product No.	Packing	Price(₩)
881	25g	5,500
882	500g	28,000

Ninhydrine — GR



닌하이드린, 2,2-Dihydroxy-1,3-dioxohydrindene
● CAS No. 485-47-2 ● EC No. 207-618-1
● $C_9H_4O_3 \cdot H_2O$ ● FW 178.15

● Solub.in H_2O 20g/l(20℃) ● pH value 4.6-5.0 (10g/l, H_2O, 20℃) ● Melting point 250-258℃(decomposition) ● Bulk density ~680kg/m³

● IMDG No Dangerous Good
● HS Code 2914 40 90

Appearance ····· White to brownish-White crysals
Melting point ····· To pass test
Solubility ····· To pass test
Sensitivity to amino acids ····· To pass test

Product No.	Packing	Price(₩)
1536	25g	45,000

Nitric Acid

질산
● CAS No. 7697-37-2 ● EC No. 231-714-2
● HNO_3 ● FW 63.01

● Vapour pressure 9.4hPa(20℃) ● Spec. density 1.39 g/cm³(20℃) ● Solub. in H_2O (20℃) soluble ● pH value 0 (20℃)strongly acid ● Melting point ~-32℃ ● Boiling point 121℃

● IMDG UN 2031 NITRIC ACID MORE THAN 50% BUT NOT MORE THAN 70%, 8, II
● HS Code 2808 00 00 ● Merck Index 10, 6420

Nitric Acid — ACS

Apprarance ····· Colorless & clear liquid.
Assay(HNO_3) ····· Min. 68.0~70.0%
Color (APHA) ····· Max. 10
Residue after ignition ····· Max. 5ppm
Chloride (Cl) ····· Max. 0.5ppm
Sulfate (SO_4) ····· Max. 1ppm
Arsenic (As) ····· Max. 0.01ppm
Heavey metals (as Pb) ····· Max. 0.2ppm
Iron (Fe) ····· Max. 0.2ppm

Nitric Acid — EL

Assay (as HNO_3) ····· 64.75 ~ 65.25%
Color ····· Max 10APHA
Residue after ignition ····· Max 2ppm
Chloride (Cl) ····· Max 0.08ppm
Phosphate (PO_4) ····· Max 0.2ppm
Sulfate(SO_4) ····· Max 0.5ppm
Aluminum (Al) ····· Max 100ppb
Arsenic (As) ····· Max 5ppb
Barium (Ba) ····· Max 100ppb
Boron (B) ····· Max 100ppb
Cadmium (Cd) ····· Max 100ppb
Calcium (Ca) ····· Max 200ppb
Chromium (Cr) ····· Max 50ppb
Cobalt (Co) ····· Max 100ppb
Copper (Cu) ····· Max 10ppb
Gallium (Ga) ····· Max 50ppb
Germanium (Ge) ····· Max 100ppb
Gold (Au) ····· Max 100ppb
Iron (Fe) ····· Max 100ppb
Lead (Pb) ····· Max 100ppb
Lithium (Li) ····· Max 100ppb
Magnesium (Mg) ····· Max 100ppb
Manganese (Mn) ····· Max 100ppb
Nickel (Ni) ····· Max 50ppb
Potassium (K) ····· Max 100ppb
Silicon (Si) ····· Max 100ppb
Silver (Ag) ····· Max 100ppb
Sodium (Na) ····· Max 200ppb
Strontium(Sr) ····· Max 100ppb
Tin(Sn) ····· Max 100ppb
Zinc (Zn) ····· Max 100ppb
Particle Count (0.5 micron and above) ····· Max 100pcs/ml

Product No.	Packing	Price(₩)
2248	3.8ℓ	12,500
1541	25kg	43,800
1711	250kg	Call

N

Nitric Acid — ELH

Assay (as HNO_3)	69.0~71.0%
Color	Max 10APHA
Residue after ignition	Max 1ppm
Chloride (Cl)	Max 0.05ppm
Phosphate (PO_4)	Max 0.05ppm
Sulfate(SO_4)	Max 0.1ppm
Aluminum (Al)	Max 5ppb
Arsenic (As)	Max 1ppb
Barium (Ba)	Max 1ppb
Boron (B)	Max 1ppb
Cadmium (Cd)	Max 1ppb
Calcium (Ca)	Max 20ppb
Chromium (Cr)	Max 10ppb
Cobalt (Co)	Max 1ppb
Copper (Cu)	Max 1ppb
Gallium (Ga)	Max 1ppb
Germanium (Ge)	Max 1ppb
Gold (Au)	Max 1ppb
Iron (Fe)	Max 10ppb
Lead (Pb)	Max 3ppb
Lithium (Li)	Max 1ppb
Magnesium (Mg)	Max 10ppb
Manganese (Mn)	Max 2ppb
Nickel (Ni)	Max 2ppb
Potassium (K)	Max 10ppb
Silicon (Si)	Max 10ppb
Silver (Ag)	Max 1ppb
Sodium (Na)	Max 10ppb
Strontium(Sr)	Max 1ppb
Tin(Sn)	Max 5ppb
Zinc (Zn)	Max 5ppb
Particle Count (0.5 micron and above)	Max 30pcs/ml

Product No.	Packing	Price(₩)
2889	250kg	Call

Nitric Acid — Extra Pure

Appearance	Colorless & clear liquid.
Assay	64.0 ~ 66.0%
Ignition residue (as Sulfate)	Max 6ppm
Chloride (Cl)	Max 6ppm
Sulfate(SO_4)	Max 5ppm
Lead (Pb)	Max 1ppm
Iron(Fe)	Max 0.8ppm
Arsenic (As)	Max 0.1ppm

Product No.	Packing	Price(₩)
1537	500g	3,300
1538	1kg	4,400
1539	25kg	38,900

Nitric Acid — Solar

Assay (as HNO_3)	Min 65.0%
Residue on ignition (as Sulphate)	Max 5ppm
Sulfate (SO_4)	Max 0.5ppm
Chloride (Cl)	Max 0.5ppm
Phosphate (PO_4)	Max 0.5ppm
Arsenic & Antimony	Max 0.01ppm
Silver (Ag)	Max 0.02ppm
Aluminum (Al)	Max 0.05ppm
Gold (Au)	Max 0.1ppm
Boron (B)	Max 0.05ppm
Barium (Ba)	Max 0.05ppm
Calcium (Ca)	Max 0.1ppm
Cadmium (Cd)	Max 0.05ppm
Cobalt (Co)	Max 0.02ppm
Chromium (Cr)	Max 0.02ppm
Copper (Cu)	Max 0.02ppm
Iron (Fe)	Max 0.2ppm
Gallium (Ga)	Max 0.02ppm
Germanium (Ge)	Max 0.1ppm
Potassium (K)	Max 0.1ppm
Lithium (Li)	Max 0.02ppm
Magnesium (Mg)	Max 0.1ppm
Manganese (Mn)	Max 0.02ppm
Sodium (Na)	Max 0.3ppm
Nickel (Ni)	Max 0.02ppm
Lead (Pb)	Max 0.05ppm
Tin (Sn)	Max 0.1ppm
Strontium (Sr)	Max 0.05ppm
Zinc (Zn)	Max 0.1Zppm

Product No.	Packing	Price(₩)
2894	250kg	Call

Nitric Acid 70% — EL

70%질산

Assay (as HNO_3)	69.0 ~ 71.0%
Color	Max 10 APHA
Residue after ignition	Max 2ppm
Chloride (Cl)	Max 0.08ppm
Phosphate (PO_4)	Max 0.2ppm
Sulfate (SO_4)	Max 0.5ppm
Aluminum (Al)	Max 100ppb
Arsenic (As)	Max 5ppb
Barium (Ba)	Max 100ppb
Boron (B)	Max 100ppb
Cadmium (Cd)	Max 100ppb
Calcium (Ca)	Max 200ppb
Chromium (Cr)	Max 50ppb
Cobalt (Co)	Max 100ppb
Copper (Cu)	Max 10ppb
Gallium (Ga)	Max 50ppb
Germanium (Ge)	Max 100ppb
Gold (Au)	Max 100ppb
Iron (Fe)	Max 100ppb
Lead (Pb)	Max 100ppb
Lithium (Li)	Max 100ppb
Magnesium (Mg)	Max 100ppb
Manganese (Mn)	Max 100ppb
Nickel (Ni)	Max 50ppb
Potassium (K)	Max 100ppb
Silicon (Si)	Max 100ppb
Silver (Ag)	Max 100ppb
Sodium (Na)	Max 200ppb
Strontium (Sr)	Max 100ppb
Tin (Sn)	Max 100ppb
Zinc (Zn)	Max 100ppb
Particle Count (0.5 micron and above)	Max 100pcs/ml

Product No.	Packing	Price(₩)
3734	3.8 ℓ	16,300

1N - Nitric Acid (1M) — Normal

1N(1M)질산

Appearance	To pass test
Factor (at 20 ℃)	1.000 ~ 1.005
Sodium (Na)	Max 10ppm
Iron (Fe)	Max 10ppm

Product No.	Packing	Price(₩)
1543	500㎖	5,000

N/10 - Nitric Acid (0.1M) Normal

N/10(0.1M)질산

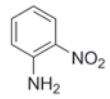
Product No.	Packing	Price(₩)
1544	500㎖	5,000

Nitric acid ammonia → *go to Ammonium Nitrate*

Nitric acid potassium salt → *go to Potassium Nitrate*

Nitric acid sodium salt → *go to Sodium Nitrate*

o-Nitroaniline Extra Pure



오쏘-나이트로아닐린, 2-Nitroaniline
- CAS No. 88-74-4 • EC No. 201-855-4
- $O_2NC_6H_4NH_2$ • FW 138.13

- Flash point 167℃ • Solub.in H_2O 1.1g/l(20℃) • pH value 6.1 (10g/l, H_2O, 20℃)(slurry) • Melting point 68-71℃ • Bulk density 500kg/m³ • Boiling point 284℃ • Ignition temp. 521℃

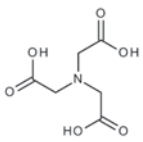
- IMDG UN 1661 NITROANILINES, 6.1, II
- HS Code 2921 42 10 • Merck Index 10, 6429

Product No.	Packing	Price(₩)
1545	25g	7,000
1546	500g	30,000

2-Nitroaniline → *go to o-Nitroaniline*

NEW

Nitrilotriacetic Acid GR / ACS



니트릴로트리아세트산
- CAS No.139-13-9 • EC No. 205-355-7
- $C_6H_9NO_6$ • FW 191.14

- Solub. in H_2O 1.28 g/l (22.5 ℃) • pH value (H_2O, 20℃) acidic,Aqueous solution • Melting point 242℃ (decomposition) • Bulk density ~ 350 kg/m³

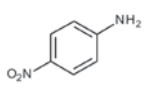
- IMDG NO Dangerous Good • HS Code 2922 49 85
- RTECS AJ0175000

Appearance ····· White to off-White solid.
Assay ····· Min 98.0%
Solubility in water ····· To pass test

Product No.	Packing	Price(₩)
4922	25g	7,000

NEW

4-Nitroaniline Extra Pure



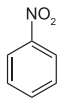
4-니트로아닐린, 1-Amino-4-nitrobenzene
- CAS No. 100-01-6 • EC No. 202-810-1
- $C_6H_6N_2O_2$ • FW 138.13

- Vapour pressure 1.33 hPa (142℃) • Spec. density 1.44 g/cm³ (20℃) • pH value (0.5 g/l, H2O, 20 ℃) neutral • Flash point 199℃ • Solub.in H_2O 0.5 g/l (20℃) • Melting point 148℃ • Boiling point 331℃ (de-composition) • Ignition temp. 500℃ • Bulk density ~ 630 kg/m³

- IMDG UN 1661 NITROANILINES, 6.1, II • HS Code 2921 42 10
- Merck Index 10, 6430

Product No.	Packing	Price(₩)
5187	25g	8,000

Nitrobenzene Extra Pure



나이트로벤젠
- CAS No. 98-95-3 • EC No. 202-716-0
- $C_6H_5NO_2$ • FW 123.11

- Refractive index 1.553(20℃, 589nm) • Vapour pressure 0.3hPa (20℃) • Spec. density 1.20 g/cm³(20℃) • Explosive limit 1.8-40Vol% • Flash point 88℃ c.c. • Solub.in H_2O 1.90g/l (20℃) • pH value ~8.1 (1g/l, H_2O, 20℃) • Saturation conc. 1g/m³(20℃) • Melting point 6.0℃ • Boiling point 211℃(1013hPa) • Ignition temp. 480℃(DIN51794)

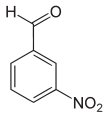
- IMDG UN 1662 NITROBENZEN, 6.1, II
- HS Code 2904 20 00 • 4류 제3석유류 (비수용성 액체) 2000ℓ

Appearance ····· Pale yellow & clear liquid.
Assay ····· Min 99.0%
Density (20℃) ····· 1.201 ~ 1.207g/ml
Freezing point ····· Min 5.2℃
Acidity (as HNO_3) ····· Max 0.006%

Product No.	Packing	Price(₩)
1549	500g	9,000

NEW

3-Nitrobenzaldehyde Extra Pure



- CAS No. 99-61-6 • EC No. 202-772-6
- $C_7H_5NO_3$ • FW 151.12

- Solub.in H_2O 1.6g/l (25℃) • Melting point 54 - 57 ℃ • Boiling point 164 ℃ (31 hPa)

- HS Code 2913 00 00 • Merck Index 10, 6433

Product No.	Packing	Price(₩)
5188	25g	12,500

p-Nitrochlorobenzene → *go to 1-Chloro-4-Nitrobenzene*

Nitromethane Extra Pure

나이트로메테인, Mononitromethane
- CAS No. 75-52-5 • EC No. 200-876-6
- CH_3NO_2 • FW 61.04

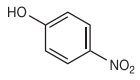
- Vapour pressure 36.4hPa (20℃) • Spec. density 1.14 g/cm³(20℃) • Explosive limit 7.3-63.0Vol% • Flash point 35.6℃c.c. • Solub.in H_2O 105g/l (20℃) • pH value 6.4 (0.6g/l, H_2O, 20℃) • Saturation conc. 90g/m³(20℃) • Melting point -29℃ • Boiling point 101.2℃(1013hPa) • Ignition temp. 418℃(DIN51794)

- IMDG UN 1261 NITROMETHANE, 3, II
- HS Code 2904 20 00 • RTECS PA9800000 • 5류 니트로화합물 200kg
- Merck Index 10, 6457

Appearance ····· Colorless to pale yellow & clear liquid.
Assay ····· Min 95.0%
Water ····· Max 0.2%
Residue after evaporation ····· Max 0.005%

Product No.	Packing	Price(₩)
1552	500g	28,500
2254	1kg	52,500

p-Nitrophenol — Extra Pure



p-니트로페놀, 4-Nitrophenol, 4-Hydroxynitrobenzene
- CAS No.100-02-7
- $C_6H_5NO_3$ • FW 139.11

- IMDG UN 1663 NITROPHENOLS, 6.1, Ⅲ • HS Code 2908 99 90

Appearance ····· Yellosish color crystalline powder.
Melting point ····· 110~116℃
pH range ····· 4.8(Yellow) ~ 7.6(Yellow)

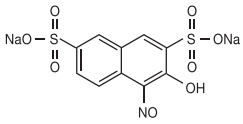
NEW

Product No.	Packing	Price(₩)
5064	25g	10,000

4-Nitrophenol → *go to p-Nitrophenol*

NEW

Nitroso-R-Salt — GR



니트로소 R 염, 3-Hydroxy-4-nitroso-2,7-naphthalenedisulfonic acid disodium salt
- CAS No.525-05-3
- $C_{10}H_5O_8NS_2Na_2$ • FW 377.3

Product No.	Packing	Price(₩)
5189	25g	48,000

NMP → *go to n-Methyl-2-Pyrrolidone*

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

O

Alphabetical list Numbers

List of O

O

Product	Page
Octadecanoic acid	209
1–Octadecanol	209
cis–9–Octadecene–1–ol	209
cis–9–Octadecenoic acid	209
1–Octane Sulfonic acid Sodium salt	209
Octanoic acid	209
1–Octanol	209
N–Octyl alcohol	209
Oleic Acid	209
Oleyl Alcohol	209
Olive oil	209
Orange G	209
Orcein	209
Orthophosphoric acid	209
0.1N – Oxalic Acid (0.1M)	209
1N–Oxalic Acid (0.5M)	210
Oxalic acid ammonium salt	210
Oxalic Acid dihydrate	210
Oxalic acid dipotassium salt monohydrate	210

Octadecanoic acid → *go to Stearic acid*

1-Octadecanol → *go to Stearyl Alcohol*

cis-9-Octadecene-1-ol → *go to Oleyl Alcohol*

cis-9-Octadecenoic acid → *go to Oleic Acid*

1-Octane Sulfonic acid Sodium salt HPLC

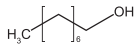
- CAS No. 5324-84-5
- $C_8H_{17}NaSO_3$ • FW 216.27

Product No.	Packing	Price(₩)
4592	25g	80,000

Octanoic acid → *go to n-Caprylic Acid*

1-Octanol → *go to N-Octyl alcohol*

N-Octyl alcohol Extra Pure



옥탄올, 1-Octanol
- CAS No. 111-87-5 • EC No. 203-917-6
- $CH_3(CH_2)_7OH$ • FW 130.23

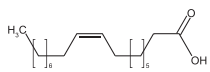
- Vapour pressure 0.031hPa(20℃) • Spec. density 0.83g/cm³(20℃) • Explosive limit 0.8Vol% • Flash point ~90℃(DIN51758) • Solub.in H_2O 0.3g/l(20℃)
- Melting point -16℃ • Boiling point 195℃(1013hPa)
- Ignition temp. 270℃(DIN51794)

- IMDG No Dangerous Good
- HS Code 2905 16 80 • Merck Index 10, 6594

Appearance ····· Colorless liquid
Assay (by GC) ····· Min 98.0%
Density (20℃) ····· 0.820 ~ 0.833g/ml
Refractive index (n 20 D) ····· 1.428 ~ 1.431
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.01%
Acid value ····· Max 0.1

Product No.	Packing	Price(₩)
2258	500㎖	12,500
1557	1 ℓ	23,000
2256	4 ℓ	43,800
2257	18 ℓ	225,000

Oleic Acid Extra Pure



올레익산, cis-9-Octadecenoic acid
- CAS No. 112-80-1 • EC No. 204-007-1
- $CH_3(CH_2)_7CH=CH(CH_2)_7COOH$ • FW 282.47

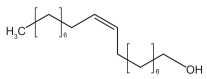
- Vapour pressure <0.1 hPa(20℃) • Spec. density ~0.89g/cm³(20℃) • Flash point 180℃ o.c. • Solub. in H_2O (20℃) insoluble • Melting point 16℃ • Boiling point 360℃(1013hPa) • Ignition temp. 350℃

- IMDG No Dangerous Good
- HS Code 3823 12 00 • 4류 제3석유류 (수용성 액체) 3000ℓ
- Merck Index 10, 6706

Appearance ····· Lemon yellow to yellow colored milky liquid
Density (20℃) ····· 0.855 ~ 0.906g/ml
Freezing point ····· Max 10.0℃
Ignition residue (as Sulfate) ····· Max 0.1%
Acid value ····· 188 ~ 206
Iodine value ····· 85 ~ 95

Product No.	Packing	Price(₩)
2260	500㎖	7,500
2261	18 ℓ	11,000

Oleyl Alcohol Extra Pure



올레일알콜, Cis-9-Octadecene-1-ol
- CAS No. 143-28-2 • EC No. 205-597-3
- $CH_3(CH_2)_7CH=CH(CH_2)_8OH$ • FW 268.49

- Vapour pressure 10.64hPa(195℃) • Spec. density 0.85g/cm³(20℃) • Flash point 112℃ • Solub.in H_2O (20℃) insoluble • Melting point 2-12℃ • Boiling point 330-360℃(1013hPa)

- IMDG No Dangerous Good
- HS Code 2905 29 90 • RTECS RG4120000 • Merck Index 10, 6710

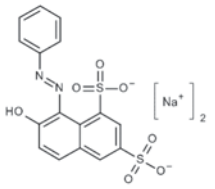
Product No.	Packing	Price(₩)
1561	500㎖	12,500

Olive oil Extra Pure

올리브오일
- CAS No. 8001-25-0

Product No.	Packing	Price(₩)
1562	500㎖	11,300

Orange G Extra Pure NEW



오렌지 G
- CAS No. 1936-15-8 • EC No. 217-705-6
- $C_{16}H_{10}N_2Na_2O_7S_2$ • FW 452.37

- Solub. in H_2O 70 g/l (20 ℃) • pH value 9 (10 g/l, H_2O, 20 ℃) • Bulk density ~ 430 kg/m³

- IMDG NO Dangerous Good • HS Code 3204 12 00
- RTECS QJ6500000

Product No.	Packing	Price(₩)
5190	25g	7,000

Orcein Extra Pure NEW

올세인, Neutral Red 28
- CAS No. 1400-62-0

Product No.	Packing	Price(₩)
5191	25g	180,000

Orthophosphoric acid → *go to Phosphoric acid*

0.1N - Oxalic Acid (0.1M) Normal

0.1N (0.1M)옥살산

Product No.	Packing	Price(₩)
1566	500㎖	6,800
1567	1 ℓ	11,000

O

1N - Oxalic Acid (0.5M) — Normal

1N (0.5M)옥살산

Product No.	Packing	Price(₩)
1565	500㎖	7,000

Oxalic acid ammonium salt
→ *go to Ammonium Oxalate monohydrate*

Oxalic Acid dihydrate

옥살산(수산)
● CAS No. 6153-56-6 ● EC No. 204-007-1
● $C_2H_2O_4 \cdot 2H_2O$ ● FW 126.07

● Vapour pressure ~21 hPa(50℃) ● Spec. density ~1.65g/cm³(20℃) ● Flash point 157℃(decomposition) ● Solub.in H_2O 102g/l (20℃) ● pH value ~1 (10g/l, H_2O, 20℃) ● Melting point 101℃ ● Boiling point 149-160℃(decomposition)

● IMDG UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (OXALIC ACID), 8, III
● HS Code 2917 11 00 ● Merck Index 10, 6784

Oxalic Acid dihydrate — Extra Pure

Appearance ····· Colorless to white colored crystal or crystalline powder.
Assay ····· 99.5 ~ 100.2%
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.05%
Chloride (Cl) ····· Max 0.003%
Sulfate (SO_4) ····· Max 0.008%
Lead (Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%
Substances darkened by sulfuric acid ····· To pass test
Arsenic (As) ····· Max 0.0001%

Product No.	Packing	Price(₩)
1563	500g	7,500
3835	25kg	112,500

Oxalic Acid dihydrate — CP

Product No.	Packing	Price(₩)
1564	1kg	11,300

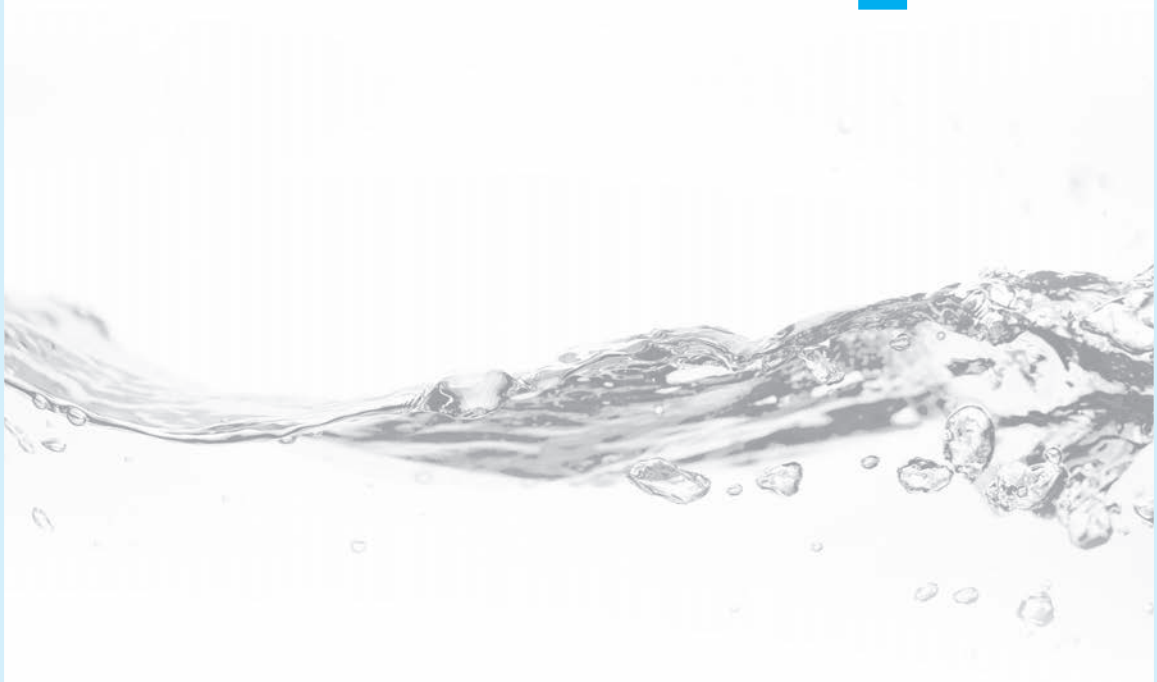
Oxalic acid dipotassium salt monohydrate
→ *go to Potassium Oxalate monohydrate*

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

P



Alphabetical list Numbers

List of P

Product	Page
Palmitic acid	214
Paraffin (56–58℃)	214
Paraffin Liquid	214
Paraform	214
Paraformaldehyde	214
Paranaphthalene	214
Pectin	214
PEG 200	214
PEG 400	214
PEG 600	214
PEG 1500	214
PEG 4000	214
PEG 6000	214
PEG 8000	214
Pentaerythritol	215
n–Pentane	215
Pentane–2,4–dione	215
1–Pentanol	215
Pentasodium triphosphate	215
Peptone	215
Perchloric Acid 60%	216
Perchloric Acid 70%	216
N/10 – Perchloric Acid (0.1M)(Acetic acid solution)	216
Perchloroethylene	216
Permanganic acid potassium salt	216
Petroleum Benzine	216
Petroleum Ether(35~60℃)	216
Petroleum Ether(40~60℃)	217
1,10–Phenanthroline monohydrate	217
Phenol	217
Phenolphthalein	217
Phenolphthalein solution 0.1%	217
Phenolphthalein solution 1%	218
Phenol Red	218
Phenol Red Solution 0.1%	218
Phenolsulfophthalein	218
2–Phenoxy ethanol	218
Phenyl chloride	218
Phenyl Ether	218
Phenyl Hydrazine Hydrochloride	218
N–Phenylacetamide	218
L(–)–Phenylalanine	218
Phenylcarbinol	218
o–Phenylenediamine	218
p–Phenylenediamine	219
Phenylformic acid	219
2–Phenylol	219
o–Phenylphenol	219
Phloroglucinol	219

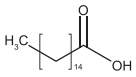
Product	Page
Phosphomolybdic acid	219
Phosphonic acid	219
Phosphoric acid 85%	219
Phosphoric acid 60%	220
Phosphoric acid tributyl ester	220
Phosphoric anhydride	220
Phosphorous Acid	220
Phosphorous Acid 40%	220
Phosphorous Acid 60%	220
Phosphorous(V) Oxide	220
Phosphorus Oxychloride	220
Phosphorus Pentoxide	220
Phosphorus Red	221
Phosphoryl Chloride	221
Phosphotungstic Acid	221
Phthalic acid dibutyl ester	221
Phthalic anhydride	221
Piperazine anhydrous	221
Polyethylene Glycol 200	221
Polyethylene Glycol 400	222
Polyethylene Glycol 600	222
Polyethylene Glycol 1500	222
Polyethylene Glycol 4000	222
Polyethylene Glycol 6000	222
Polyethylene Glycol 8000	222
Polyoxyethylene octylphenyl ether	222
Polyoxyethylene sorbitan monolaurate	222
Polyoxyethylene sorbitan monooleate	222
Polyoxyethylene sorbitan monopalmitate	222
Polyoxyethylene sorbitan monostearate	222
Polyphosphoric Acid	223
Polyvinyl Alcohol 500	223
PolyVinyl Alcohol 1500	223
Polyvinyl pyrrolidone	223
Potassium Acetate	223
Potassium Aluminium Sulfate	223
Potassium Bicarbonate	223
Potassium Biphthalate	224
Potassium Bitartrate	224
Potassium Bromate	224
N/10 – Potassium Bromate (1/60M)	224
Potassium Bromide	224
Potassium Carbonate Anhydrous	224
Potassium Chlorate	224
Potassium Chloride	225
3.3M–Potassium Chloride (3.3M)	225
N/10 – Potassium Chloride (0.1M)	225
Potassium Chromate	225
Potassium Citrate monohydrate	225

Product	Page
Potassium Cyanide	225
Potassium Dichromate	226
1N – Potassium Dichromate (1/6M)	226
N/10 – Potassium Dichromate (1/60M)	226
Potassium dihydrogen phosphate	226
Potassium diphosphate	226
Potassium Ferricyanide	226
Potassium Ferrocyanide	226
Potassium Fluoride	226
Potassium hexacyanoferrate(Ⅱ)	226
Potassium hexacyanoferrate(Ⅲ)	226
Potassium hydrogen carbonate	226
Potassium Hydrogen Phthalate	227
Potassium hydrogen tartrate	227
Potassium Hydroxide	227
Potassium Hydroxide 45%	227
Potassium Hydroxide 30% Solution	227
1N–Potassium Hydroxide (1M)	227
N/2 Potassium Hydroxide (0.5M)	228
N/10–Potassium Hydroxide (0.1M)	228
N/10–Potassium Hydroxide (Ethanol sol.)(0.1M)	228
Potassium Iodate	228
N/10 Potassium Iodate (1/60M)	228
Potassium Iodide	228
N/10 Potassium Iodide	228
Potassium Metabisulfite	228
Potassium Nitrate	229
Potassium Oxalate monohydrate	229
Potassium Permanganate	229
1N–Potassium Permanganate (0.2M)	229
N/2–Potassium Permanganate (0.1M)	229
N/5–Potassium Permanganate (0.04M)	229
N/10–Potassium Permanganate (0.02M)	229
N/40–Potassium Permanganate (0.005M)	229
Potassium peroxodisulfate	229
Potassium Persulfate	230
Potassium Phosphate dibasic	230
Potassium Phosphate monobasic	230
Potassium Phosphate tribasic	230
Potassium pyrochromate	230
Potassium Pyrophosphate	230
Potassium pyrosulfate	230
Potassium rhodanide	230
Potassium sodium tartrate tetrahydrate	230
Potassium Sorbate	231
Potassium Sulfate	231
Potassium Tartrate hemihydrate	231
Potassium Thiocyanate	231
Prethanol	231

Product	Page
Prethanol–A	231
Primelic ketone	231
L(–)–Proline	232
1,2–Propanediol	232
1–Propanol	232
2–Propanol	232
2–Propen–1–ol	232
2–Propenamide	232
2–Propenoic acid	232
Propionic acid	232
n–Propyl alcohol	233
Propyl Gallate	233
Propyl 4–hydroxybenzoate	233
Propyl Paraben	233
Propylene Glycol	233
Propylene Glycol Monomethyl Ether	233
Propylene Glycol Monomethyl Ether Acetate	233
PTSA	233
Propylene Glycol momomethyl ether	233
Propylene Glycol momomethyl ether Acetate	233
Pyridine	234
3–Pyridine carboxamide	234
Pyridine–3–carboxylic acid	234
Pyrogallol	234
Pyrophosphoric acid	234
2–Pyrrolidinone	234
2–Pyrrolidone	234

P

Palmitic acid — Extra Pure



팔미트산, Hexadecanoic acid
- CAS No. 57-10-3 • EC No. 200-312-9
- $CH_3(CH_2)_{14}COOH$ • FW 256.43

- Spec. density 0.852g/cm³(55℃) • Flash point 206℃
- Solub.in H_2O (20℃) insoluble • Melting point 61-63℃
- Bulk density 415kg/m³ • Boiling point 271.4℃(133hPa)

- IMDG No Dangerous Good
- HS Code 2915 70 15 • Merck Index 10, 6860

Product No.	Packing	Price(₩)
812	500g	9,400

Paraffin (56-58℃) — Extra Pure

파라핀,
- CAS No. 8002-74-2 • EC No. 232-315-6
- C_nH_{2n+2}

- Spec. density ~0.90g/cm³(20℃) • Flash point ~240℃ • Solub.in H_2O (20℃)in-soluble • Melting point 56-58℃ • Bulk density ~400-500kg/m³ • Boiling point >350℃(133hPa) • Ignition temp. >300℃

- IMDG No Dangerous Good
- HS Code 2712 20 90 • Merck Index 10, 6885

Appearance ····· Colorless to yellow colored solid
Melting point ····· 56.0 ~ 58.0℃

Product No.	Packing	Price(₩)
1568	500g	7,000

Paraffin Liquid — Extra Pure

유동파라핀, liquid paraffin
- CAS No. 8012-95-1 • EC No. 232-384-2
- $C_nH_{(2n+2)}$

- Vapour pressure 0.0001 hPa(20℃) • Spec. density 0.85g/cm³(20℃) • Flash point ~195℃ • Solub.in H_2O (20℃) insoluble • Boiling point 300-450℃ • Ignition temp. >300℃

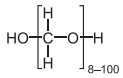
- IMDG No Dangerous Good
- HS Code 2710 19 85 • RTECS PY8030000
- 4류 제4석유류 (비수용성 액체) 6000ℓ • Merck Index 10, 70481

Appearance ····· Colorless & clear liquid
Density ····· 0.830 ~ 0.890g/ml
Paraffin (Block from) ····· To pass test

Product No.	Packing	Price(₩)
1215	500mℓ	5,600
2270	1 ℓ	9,400
2271	18 ℓ	95,500

Paraform → *go to Paraformaldehyde*

Paraformaldehyde — Extra Pure



파라폼알데하이드, Paraform
- CAS No. 30525-89-4
- $(CH_2O)n$

- Vapour pressure 1.5-2hPa (20℃) • Spec. density 1.3g/cm³(20℃) • Explosive limit 60g/cm³ • Solub.in H_2O (20℃) slightly soluble • pH value 4.0-5.5(10g/l, H_2O, 20℃)(suspension) • Melting point 120-170℃
- Bulk density 500-800kg/m³ • Ignition temp. 370℃

- IMDG UN 2213 PARAFORMALDEHYDE, 4.1, III
- HS Code 2912 60 00 • RTECS RV0540000 • Merck Index 10, 6888

Appearance ····· White amorphous powder
Assay ····· Min 95.0%
Solubility in NH_4OH ····· To pass test
Acid or alkali ····· To pass test
Ignition residue ····· Max 0.1%
Chloride (Cl) ····· Max 0.002%
Sulfate (SO_4) ····· Max 0.01%
Heavy metals (asPb) ····· Max 0.002%
Iron (Fe) ····· Max 0.001%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
1570	500g	7,000
2272	1kg	11,400

Paranaphthalene → *go to Anthracene*

Pectin

펙틴
- CAS No. 9000-69-5

Pectin — CP

Product No.	Packing	Price(₩)
1573	500g	52,500

Pectin — Extra Pure

Product No.	Packing	Price(₩)
2273	25g	7,500

PEG 200 → *go to Polyethylene Glycol 200*

PEG 400 → *go to Polyethylene Glycol 400*

PEG 600 → *go to Polyethylene Glycol 600*

PEG 1500 → *go to Polyethylene Glycol 1500*

PEG 4000 → *go to Polyethylene Glycol 4000*

PEG 6000 → *go to Polyethylene Glycol 6000*

PEG 8000 → *go to Polyethylene Glycol 8000*

NEW

Pentaerythritol — Extra Pure

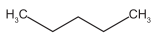
펜타에리트리톨, Tetramethylolmethane
● CAS No. 115-77-5 ● EC No. 204-104-9
● $C_5H_{12}O_4$ ● FW 136.14

● Vapor pressure 〈 – 0.00001 hPa (20 ℃) ● Spec. density 1.396 g/cm³ (20 ℃) ● Solub. in H_2O 72.3 g/l (25 ℃) ● Melting point 256 – 258 ℃ ● pH value 3.5 – 4.5 (100 g/l, H_2O, 35 ℃) ● Boiling point 276 ℃ (40 hPa) ● Bulk density ~ 750 – 850 kg/m³

● IMDG NO Dangerous Good ● HS Code 2905 42 00
● Merck Index 10, 6973

Product No.	Packing	Price(₩)
5192	500g	10,500

n - Pentane



노말-펜탄, 1,3-Dimethyl propane
● CAS No. 109-66-0 ● EC No. 203-692-4
● $CH_3(CH_2)_3CH_3$ ● FW 72.15

● Vapour pressure 573hPa (20℃) ● Spec. density 0.63 g/cm³(20℃) ● Explosive limit 1.4-8Vol% ● Flash point -48℃c.c. ● Solub.in H_2O 0.36g/l (16℃) ● Saturation conc. 1698g/m³(20℃) ● Melting point -129.7℃ ● Boiling point 36.1℃ (1013hPa) ● Ignition temp. 285℃

● IMDG UN 1265 PENTANES, 3, I
● HS Code 2901 10 00 ● RTECS RZ9450000 ● 4류 특수인화물 50ℓ
● Merck Index 10, 6983

n – Pentane — Extra Pure

Appearance	Clear
Solubility in water	To pass test
Specific gravity(20/20℃)	Max 0.626
Water	Max 0.3%
Acidity (as CH_3COOH)	Max 0.003%
Substances darkened by sulfuric	To pass test
Thiophene	To pass test
Assay	Min 96.0%

Product No.	Packing	Price(₩)
1574	1ℓ	15,000

n – Pentane — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum Absorbance

190 nm	Max 1.00
200 nm	Max 0.30
210 nm	Max 0.10
254 nm	Max 0.014
UV Cutoff	Max 190nm
Assay (by GC, n-Pentane)	Min 98.0%
(total C 5 Hydrocarbons)	Min 99.9%
Color (APHA)	Max 5
Water	Max 0.02%
Residue after evaporation	Max 5ppm
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
1575	4ℓ	75,000

n – Pentane — GR

Product No.	Packing	Price(₩)
3836	2.5ℓ	37,500
4688	4ℓ	57,000

n – Pentane — PESTICIDE

Extraction-Concentration Suitability

ECD Detectable residue (as Heptachlor epoxide)	Max 10ppt
Assay (by GC, n-Pentane)	Min 98.0%
(total C 5 Hydrocarbons)	Min 99.9%
Color (APHA)	Max 10
Water	Max 0.02%
Residue after Evaporation	Max 5ppm

Product No.	Packing	Price(₩)
1576	4ℓ	82,500

n – Pentane — Ultimate

Extraction-Concentration Suitability

ECD Detectable residue (as Heptachlor epoxide)	Max 10ppt
FID Detectable residue (as 2-Octanol)	Max 5ppb

Ultraviolet Spectrophotometry
Maximum Absorbance

190 nm	Max 1.00
200 nm	Max 0.30
210 nm	Max 0.10
254 nm	Max 0.01
UV Cutoff	Max 190nm
Assay (by GC, n-Pentane)	Min 98.0%
(total C 5 Hydrocarbone)	Min 99.9%
Color (APHA)	Max 5
Water	Max 0.02%
Residue after evaporation	Max 1ppm
Fluorescecce Background	To pass test
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
2291	4ℓ	87,500

Pentane-2,4-dione → *go to Acetyl acetone*

1-Pentanol → *go to n-Amyl Alchol*

Pentasodium triphosphate → *go to Sodium Tripolyphosphate*

Peptone — Extra Pure

펩톤
● CAS No. 73049-73-7

Appearance	White to brown colored crystal
Solubility in water	To pass test
pH(5%)	6.4~7.0
Chloride (Cl)	Max 1.0%
Amino nitrogen	Max 3.0%
Ignition residue (as Sulfate)	Max 15.0%
Loss on drying(105℃)	Max 7.0%

Product No.	Packing	Price(₩)
1777	500g	56,300

P

Perchloric Acid 60% GR

과염소산 60%
- CAS No. 7601-90-3
- $HClO_4$ • FW 100.46

- Spec. density 1.53 g/cm³(15℃) • Solub.in H_2O (20℃) soluble • pH value(20℃) strongly acid • Boiling point ~160℃

- IMDG UN 1873 PERCHLORIC ACID, 5.1 (8), I
- HS Code 2811 19 80 • 6류 과염소산 300kg • Merck Index 10, 7020

Appearance	Colorless liquid
Assay	60.0 ~ 62.0%
Ignition residue (as Sulfate)	Max 0.003%
Chloride (Cl)	Max 3ppm
Chlorate (ClO_3)	Max 0.001%
Phosphate & Silicate	Max 0.005%
Sulfate (SO_4)	Max 0.001%
Total Nitrogen (as N)	Max 0.002%
Copper (Cu)	Max 0.1ppm
Silver (Ag)	Max 1ppm
Lead (Pb)	Max 0.1ppm
Arsenic (As)	Max 0.05ppm
Manganese (Mn)	Max 0.3ppm
Iron(Fe)	Max 1ppm

Product No.	Packing	Price(₩)
1580	1kg	27,000

Perchloric Acid 70% GR

과염소산 70%

- Spec. density 1.68 g/cm³(20℃) • Solub.in H_2O (20℃) soluble • pH value(20℃) strongly acid • Melting point 18℃ • Boiling point 198.7℃

- IMDG UN 1873 PERCHLORIC ACID, 5.1 (8), I
- HS Code 2811 19 80 • 6류 과염소산 300kg
- Merck Index 10, 7020

Appearance	Colorless liquid.
Assay	70.0 ~ 72.0%
Ignition residue (as Sulfate)	Max 0.003%
Chloride (Cl)	Max 4ppm
Chlorate (ClO_3)	Max 0.001%
Free chlorine (Cl)	Max 5ppm
Phosphate & Silicate	Max 0.005%
Sulfate (SO_4)	Max 0.001%
Total Nitrogen (as N)	Max 0.002%
Copper (Cu)	Max 0.1ppm
Silver (Ag)	Max 1ppm
Lead (Pb)	Max 0.1ppm
Arsenic (As)	Max 0.05ppm
Manganese (Mn)	Max 0.3ppm
Iron(Fe)	Max 1ppm

Product No.	Packing	Price(₩)
1582	500g	22,500

N/10 - Perchloric Acid (0.1M)(Acetic acid solution) Normal

N/10(0.1M)과염소산(아세트산용액)
- CAS No. 7601-90-3

- Spec. density 1.06g/cm³(20℃) • Flash point 40℃ • Solub. in H_2O (20℃) insoluble • pH value ~0.1(20℃) • Ignition temp. ~485℃

- IMDG UN 2789 ACETIC ACID, GLACIAL, 8(3), II
- HS Code 3822 00 00

Appearance	To pass test
Factor (at. 20℃)	1.000~1.005

Product No.	Packing	Price(₩)
1583	500㎖	12,500

Perchloroethylene Extra Pure

사염화에틸렌, Tetrachloroethylene
- CAS No. 127-18-4 • EC No. 204-825-9
- C_2Cl_4 • FW 165.83

- Vapour pressure 19hPa (20℃) • Spec. density 1.62g/cm³(20℃) • Solub.in H_2O 0.16g/l (20℃) • Saturation conc. 126g/m³ (20℃) • Melting point -22℃ • Boiling point 121℃ (1013hPa)

- IMDG UN 1897 TETRACHLOROETHYLENE, 6.1, III, Marien Pollutan: P
- HS Code 2903 23 00

Assay (GC)	Min 98.0%
Non-volatile matters	Max 0.002%
Water	Max 0.01%
Specific Gravity(20/20℃)	1.620 ~ 1.630g/ml
Acid(as HCl)	Max 0.001%
Alkali(as NaOH)	Max 0.025%

Product No.	Packing	Price(₩)
1584	1kg	8,800

Permanganic acid potassium salt
→ *go to Potassium Permanganate*

Petroleum Benzine Extra Pure

석유 벤진
- CAS No. 8030-30-6 • EC No. 265-151-9

- Boiling range 50~80℃ • Freezing point -40℃ • Spec. density 0.69 g/cm³

- IMDG UN 1268 PETROLEUM DISTILLATES, N.O.S., 3, I
- HS Code 2701 11 25 • Merck Index 10, 7050

Appearance	Colorless volatile liquid.
Water	Max 0.05%
Sulfide & reducing substances	To pass test
Fat	To pass test
Substances darkened by sulfuric acid	To pass test
Acidity	Max 10ppm

Product No.	Packing	Price(₩)
1586	500㎖	4,400
1587	1ℓ	7,800
1588	18ℓ	62,500

Petroleum Ether (35℃~60℃)

석유에테르(35℃~60℃)
- CAS No. 8032-32-4

- Spec. density 0.64 g/cm³(25℃) • Explosive limit 1.0-7.4Vol% • Flash point -49℃ • Boiling range 35℃~60℃

- IMDG UN 1268 PETROLEUM DISTILLATES, N.O.S., 3, I
- HS Code 2710 11 25 • 4류 제1석유류 (비수용성 액체) 200ℓ
- Merck Index 10, 7050

Petroleum Ether (35℃~60℃) Extra Pure

Residue after evaporation ····· Max 0.002%
Acidity ····· To pass test
Fatty and sulfide ····· To pass test
Substances darkened by sulfuric acid ····· To pass test
Boiling range(35~60℃) ····· Min 90.0vol%

Product No.	Packing	Price(₩)
1590	500㎖	7,000
1654	1 ℓ	12,000
2301	4 ℓ	35,000
2299	18 ℓ	82,300

Petroleum Ether (35℃~60℃) HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum Absorbance
220 nm ····· Max 1.00
230 nm ····· Max 0.20
250 nm ····· Max 0.05
270 nm ····· Max 0.01
400 nm ····· Max 0.01
UV Cutoff ····· Max 220nm
Boiling range(intial to dry point) ····· 35 ~ 60℃
Color (APHA) ····· Max 10
Water ····· Max 0.01%
Residue after evaporation ····· Max 5ppm
Acidity ····· To pass test

Product No.	Packing	Price(₩)
1591	4 ℓ	65,600

Petroleum Ether (35℃~60℃) GR

Product No.	Packing	Price(₩)
4208	2.5 ℓ	22,500
2940	4 ℓ	36,300
4200	20 ℓ	Call

Petroleum Ether (35℃~60℃) ACS

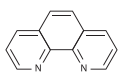
Color(APHA) ····· Max 10
Boiling range ····· 35 ~ 60℃
Residue after evaporation ····· Max 0.001%
Acidity ····· To pass test

Product No.	Packing	Price(₩)
2302	4 ℓ	43,800

Petroleum Ether (40℃~60℃) GR

Product No.	Packing	Price(₩)
4117	2.5 ℓ	22,500
4162	4 ℓ	31,300
4142	200 ℓ	Call

1,10-Phenanthroline monohydrate Indicator



1,10-페난트로린, o-Phenanthroline monohydrate
● CAS No. 5144-89-8 (monohydrate)
● EC No. 200-629-2
● $C_{12}H_8N_2 \cdot H_2$ ● FW 198.22

● Solub.in H_2O 3.3g/l (20℃) ● Melting point 93~94℃
● Bulk density ~300kg/m³

● IMDG UN2811 TOXIC SOLIS, ORGANIC, N.O.S. (1,10-PHENANTHROLINE HYDRATE), 6.1, III ● HS Code 2933 99 8

Appearance ····· White crystal, crystallinity powder.
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.05%
Iron assay agreement congruity ····· To pass test

Product No.	Packing	Price(₩)
1595	25g	28,500

Phenol Extra Pure

페놀(석탄산)
● CAS No. 108-95-2 ● EC No. 203-632-7
● C_6H_5OH ● FW 94.11

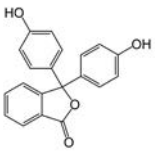
● Vapour pressure 0.2hPa (20℃) ● Spec. density 1.06 g/cm³(20℃) ● Explosive limit 1.3-9.5Vol% ● Flash point 81℃ c.c. ● Solub.in H_2O 84g/l (20℃) ● pH value ~5(50g/l, H_2O, 20℃) ● Melting point 40.8℃ ● Bulk density ~620kg/m³ ● Boiling point 181.8℃ (1013hPa) ● Ignition temp. 595℃ (DIN51794)

● IMDG UN 1671 PHENOL, SOLID, 6.1, II
● HS Code 2907 11 00 ● RTECS SJ3325000 ● Merck Index 10, 7115

Appearance ····· White to pale red color, glossy.
Assay (by GC) ····· Min 98.0%
Solubility in water ····· To pass test
Solubility in NaOH ····· To pass test
Freezing point ····· Min 39.0℃
Residue after evaporation ····· Max 0.05%

Product No.	Packing	Price(₩)
1597	1kg	9,400

Phenolphthalein Extra Pure



페놀프탈레인
● CAS No. 77-09-8 ● EC No. 201-004-7
● $C_{20}H_{14}O_4$ ● FW 318.33

● Spec. density 1.30 g/cm³(20℃) ● Solub.in H_2O 0.092g/l (20℃) ● Melting point 258-262℃ ● Bulk density 350-450kg/m³

● IMDG No Dangerous Good
● HS Code 232 29 10 ● Merck Index 10, 7117

Appearance ····· White crystalline powder.
Assay ····· Min 98.0%
Solubility in ethanol ····· To pass test
Absorbance(5mg/l, pH 9.8) ····· Min 0.34
pH range ····· 7.8(Colorless) ~ 10.0(Red)

Product No.	Packing	Price(₩)
1600	500g	27,500

Phenolphthalein Indicator

페놀프탈레인 지시약

Product No.	Packing	Price(₩)
1599	25g	4,400

Phenolphthalein solution 0.1% Indicator solution

페놀프탈레인용액 0.1%

Product No.	Packing	Price(₩)
1601	500㎖	6,900

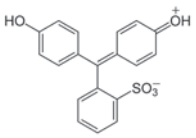
P

Phenolphthalein solution 1% — Indicator solution

페놀프탈레인용액 1%

Product No.	Packing	Price(₩)
3738	500㎖	7,500

Phenol Red — Indicator



페놀레드, Phenolsulfophthalein

- CAS No. 143-74-8 • EC No. 205-609-7
- $C_{19}H_{14}O_5S$ • FW 354.38

- Solub. in H_2O 0.77g/l (100℃)
- Melting point >300℃
- Bulk density ~200-300kg/m³

- IMDG No Dangerous Good
- HS Code 2934 99 90 • RTECS SJ7490000

Appearance ····· Greenish red to red colored crystalline powder.
Solubility in ethanol ····· To pass test
Solubility in NaOH Solution ····· To pass test
Absorbance(5mg/l, pH 8.4) ····· Min 0.53
pH range[6.8(Yellow) ~ 8.4(Red)] ····· To pass test

Product No.	Packing	Price(₩)
2306	25g	27,000

Phenol Red Solution 0.1% — Indicator solution

페놀레드용액 0.1%

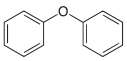
Product No.	Packing	Price(₩)
2307	500㎖	11,300

Phenolsulfophthalein → *go to Phenol Red*

2-Phenoxy ethanol → *go to Ethylene Glycol monophenyl ether*

Phenyl chloride → *go to Monochlorobenzene*

Phenyl Ether — Extra Pure



페닐에테르, Diphenyl Ether

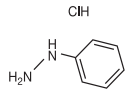
- CAS No. 101-84-8 • EC No. 202-981-2
- $(C_6(H_5)_2O$ • FW 170.21

- Vapour pressure 0.05hPa (20℃) • Spec. density 1.07 g/cm³(20℃) • Explosive limit 0.8-1.5Vol% • Flash point 115℃ c.c. • Solub.in H_2O 0.018g/l (25℃) • Melting point 24-27℃ • Boiling point 259℃ • Ignition temp. 610℃

- IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (DIPHENYLETHER), 9, III, Marine Pollutant: P
- HS Code 2909 30 10 • RTECS KN8970000 • Merck Index 10, 7169

Product No.	Packing	Price(₩)
2311	500g	15,000

Phenyl Hydrazine Hydrochloride — Extra Pure NEW



페닐하이드라진 염화수화물

- CAS No. 59-88-1 • EC No. 200-444-7
- $C_6H_9ClN_2$ • FW 144.6

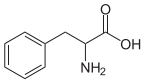
- Solub. in H_2O 50 g/l (20 ℃) • pH value 2.6 – 2.9 (50 g/l, H_2O) • Melting point 242 – 246 ℃ (decomposition)
- Bulk density ~ 330 kg/m³

- IMDG UN 2811 TOXIC SOLID, ORGANIC, N.O.S.(PHENYLHYDRAZINIUM CHLORIDE), 6.1, III • HS Code 2928 00 90
- RTECS MV9000000 • Merck Index 10, 7175

Product No.	Packing	Price(₩)
5193	25g	15,000

N-Phenylacetamide → *go to Acetanilide*

L(-) - Phenylalanine — Extra Pure



페닐알라닌, α-Amino-β-phenyl propionic acid

- CAS No. 63-91-2 • EC No. 200-568-1
- $C_6H_5CH_2(NH_2)COOH$ • FW 165.19

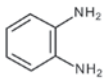
- Solub.in H_2O 27 g/l (20℃) • pH value 5.4-6.0 (10 g/l, H_2O, 20℃) • Melting point 275-283 ℃ (decomposition) • Bulk density ~580kg/m³

- IMDG No Dangerous Good
- HS Code 2922 49 95 • RTECS AY7535000

Product No.	Packing	Price(₩)
2313	25g	8,400

Phenylcarbinol → *go to Benzyl Alcohol*

o-Phenylenediamine — GR NEW



오르토-페닐렌디아민 1,2-Diaminobenzene

- CAS No. 95-54-5 • EC No. 202-430-6
- $C_6H_8N_2$ • FW 108.14

- Vapour pressure 0.013 hPa (20 ℃) • Spec. density 1.14 g/cm³ (20 ℃) • Solub. in H_2O 54 g/l (20 ℃) • Explosive limit 1.5 %(V) • Flash point 110 ℃ • pH value 7 – 8 (50 g/l, H_2O, 20 ℃) • Melting point 99 – 102 ℃ • Boiling point 257 ℃ (1013 hPa) • Bulk density ~ 530 kg/m³ • Ignition temp. 540 ℃

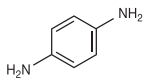
- IMDG UN 1673 PHENYLENEDIAMINES, 6.1, III • HS Code 2921 51 19
- RTECS OH2850000

Appearance ····· Pale/brownish yellow flakes.
Assay ····· Min 98.0%
Solubility in ethanol ····· To pass test
Melting point ····· 101~105℃
Ignition residue (as Sulfate) ····· Max 0.03%

Product No.	Packing	Price(₩)
5067	25g	22,500

NEW

p-Phenylenediamine — Extra Pure



오쏘-페닐페놀, 1,4-Phenylenediamine
● CAS No. 106-50-3 ● EC No. 203-404-7
● $C_6H_8N_2$ ● FW 108.14

● Vapor pressure 0.01 hPa (20 ℃) ● Spec. density 1.135 g/cm³ (20 ℃) ● Solub. in H_2O 47 g/l (25 ℃) ● Melting point 139 – 141 ℃ ● pH value 9 (50 g/l, H_2O, 20 ℃) ● Flash point 156 ℃ ● Ignition temp. 567 ℃ ● Boiling point 267 ℃ ● Bulk density ~ 600 kg/m³

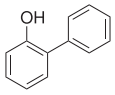
● IMDG UN 1673 PHENYLENEDIAMINES, 6.1, III ● HS Code 2921 51 19
● RTECS SS8050000 ● Merck Index 10, 7166

Product No.	Packing	Price(₩)
5194	25g	9,800

Phenylformic acid → *go to Benzoic Acid*

2-Phenylol → *go to o - Phenylphenol*

o - Phenylphenol — Extra Pure



오쏘-페닐페놀, 2-Diphenylol, Biphenyl-2-ol
● CAS No. 90-43-7 ● EC No. 201-993-5
● $C_6H_6C_6H_4OH$ ● FW 170.21

● Vapour pressure 0.4hPa (20℃) ● Spec. density 1.26 g/cm³(20℃) ● Explosive limit 1.4-9.5Vol% ● Flash point 138℃(DIN51758) ● Solub.in H_2O 0.7g/l (20℃) ● pH value 7 (0.1g/l, H_2O, 20℃) ● Melting point 56-58℃ ● Bulk density 600kg/m³ ● Boiling point 286℃ (1013hPa) ● Ignition temp. >520℃

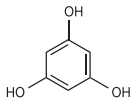
● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (BIPHENYL-2-OL), 9, III
● HS Code 2907 19 90 ● Merck Index 10, 7186

Appearance ····· White or pink color
Assay ····· Min 97.0%
Melting point ····· 57.0 ~ 59.0℃
Ignition loss ····· Max 0.05%
Lead (Pb) ····· Max 0.002%

Product No.	Packing	Price(₩)
1604	500g	56,000

NEW

Phloroglucinol — GR / AR



프로로글루시놀, 1,3,5-Trihydroxybenzene anhydrous
● CAS No. 108-73-6 ● EC No. 203-611-2
● $C_6H_6O_3$ ● FW 126.11

● Solub. in H_2O 10 g/l (20 ℃) ● Melting point 217 – 220 ℃ ● Bulk density 560 kg/m³

● IMDG NO Dangerous Good ● HS Code 2907 29 00
● Merck Index 10, 7212

Appearance ····· Yellow powder.
Assay ····· Min 99.0%
Melting point ····· 217 ~ 220℃
Diresorcinol ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.1%

Product No.	Packing	Price(₩)
4923	25g	48,000

Phosphomolybdic acid — GR / AR / ACS

NEW

포스포몰리브드산수화물, 12 Molybdo(VI) phosphoric Acid n-Hydrate
● CAS No. 51429-74-4 ● EC No. 234-713-5
● $H_3(PMo_{12}O_{40}) \cdot nH_2O$ ● FW 1825.28

● Solub. in H_2O (20 ℃) soluble ● pH value (H_2O) strongly acid ● Melting point 78 – 90 ℃ (anhydrous substance) ● Bulk density 980 kg/m³

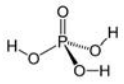
● IMDG UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (MOLYBDATO-PHOSPHORIC ACID), 8, III ● HS Code 2811 19 80
● Merck Index 10, 7226

Appearance ····· Yellow moist crystals.
Melting point ····· 79 ~ 90℃
Insoluble matter ····· Max 0.01%
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.025%
Heavy metals(as Pb) ····· Max 0.005%
Iron (Fe) ····· Max 0.005%
Calcium (Ca) ····· Max 0.02%
Ammonium (NH_4) ····· Max 0.01%

Product No.	Packing	Price(₩)
4686	25g	15,000

Phosphonic acid → *go to Phosphorous Acid*

Phosphoric acid 85%



인산, Orthophosphoric acid
● CAS No. 7664-38-2 ● EC No. 231-633-2
● H_3PO_4 ● FW 98.00

● Vapour pressure 2hPa (20℃) ● Spec. density 1.71 g/cm³(25℃) ● Solub.in H_2O soluble ● pH value <0.5 (100g/l, H_2O, 20℃) ● Melting point -17℃ ● Boiling point 158℃

● IMDG UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III
● HS Code 2909 20 00

Phosphoric Acid 85% — EL

Assay (asH_3PO_4) ····· 84.0 ~ 86.0%
Color ····· Max 10APHA
Insoluble matter ····· Max 50ppm
Reducing Substances ····· To pass test
Volatile acids (asCH_3COOH) ····· Max 10ppm
Chloride (Cl) ····· Max 1ppm
Nitrate (NO_3) ····· Max 5ppm
Sulfate(SO_4) ····· Max 10ppm
Aluminum (Al) ····· Max 1ppm
Arsenic (As) ····· Max 0.5ppm
Calcium (Ca) ····· Max 1ppm
Cobalt (Co) ····· Max 1ppm
Copper (Cu) ····· Max 0.5ppm
Gallium (Ga) ····· Max 0.1ppm
Iron(Fe) ····· Max 1ppm
Lead (Pb) ····· Max 1ppm
Lithium (Li) ····· Max 1ppm
Magnesium (Mg) ····· Max 1ppm
Manganese (Mn) ····· Max 0.5ppm
Nickel (Ni) ····· Max 1ppm
Potassium (K) ····· Max 1ppm
Sodium (Na) ····· Max 10ppm
Strontium(Sr) ····· Max 1ppm
Particle Count (0.5 micron and above) ····· Max 100pcs/ml

Product No.	Packing	Price(₩)
2932	6kg	Call
2883	30kg	112,500

P

P

Phosphoric Acid 85% Extra Pure

Appearance ····· Colorless & clear liquid, viscous.
Assay ····· Min 85.0%
Solubility in ethanol ····· To pass test
Chloride (Cl) ····· Max 5ppm
Nitrate (NO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.004%
Lead (Pb) ····· Max 0.005%
Iron (Fe) ····· Max 0.0025%
Arsenic (As) ····· Max 1.5ppm
Substances reducing permanganate ····· To pass test

Product No.	Packing	Price(₩)
1606	500g	5,000
1607	1kg	8,800
1608	20kg	75,000

Phosphoric Acid 85% GR

Product No.	Packing	Price(₩)
5009	2.5 ℓ	15,500

Phosphoric Acid 85% HPLC

Product No.	Packing	Price(₩)
4086	4 ℓ	Call

Phosphoric acid 60 % EL

● CAS No. 7664-38-2

Assay (asH_3PO_4) ····· 59.75 ~ 60.25%
Color ····· Max 10APHA
Insoluble matter ····· Max 50%
Reducing Substances ····· To pass test
Volatile acids (asCH_3COOH) ····· Max 10ppm
Chloride (Cl) ····· Max 1ppm
Nitrate (NO_3) ····· Max 5ppm
Sulfate(SO_4) ····· Max 10ppm
Aluminum (Al) ····· Max 1ppm
Arsenic (As) ····· Max 0.5ppm
Calcium (Ca) ····· Max 1ppm
Cobalt (Co) ····· Max 1ppm
Copper (Cu) ····· Max 0.5ppm
Gallium (Ga) ····· Max 0.1ppm
Iron(Fe) ····· Max 1ppm
Lead (Pb) ····· Max 1ppm
Lithium (Li) ····· Max 1ppm
Magnesium (Mg) ····· Max 1ppm
Manganese (Mn) ····· Max 0.5ppm
Nickel (Ni) ····· Max 1ppm
Potassium (K) ····· Max 1ppm
Sodium (Na) ····· Max 10ppm
Strontium(Sr) ····· Max 1ppm
Particle Count (0.5 micron and above) ····· Max 100pcs/ml

Product No.	Packing	Price(₩)
2888	3.8 ℓ	37,500
1611	30kg	Call

Phosphoric acid tributyl ester → *go to TriButyl phosphate*

Phosphoric anhydride → *go to Phosphorus Pentoxide*

Phosphorous Acid GR

아인산, Phosphonic acid
● CAS No. 13598-36-2
● H_3PO_3 ● FW 82.00
● Spec. density 1.65 g/cm³(21℃) ● Melting point 73.6℃ ● Boiling point 200℃ (decomp)

● IMDG UN 2834

Assay ····· 97.0 ~ 100.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.006%
Phosphate (PO_4) ····· Max 0.1%
Heavy metals (as Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
2317	1kg	22,500

Phosphorous Acid 40% solution

Product No.	Packing	Price(₩)
2312	1kg	8,800

Phosphorous Acid 45% solution

Product No.	Packing	Price(₩)
3489	1kg	8,800

Phosphorous(V) Oxide → *go to Phosphorus Pentoxide*

Phosphorus Oxychloride Extra Pure

옥시염화인, Phosphoryl chloride, Phosphorus oxide trichloride
● CAS No. 10025-87-3 ● EC No. 233-046-7
● $POCl_3$ ● FW 153.33
● Vapour pressure 36hPa (20℃) ● Spec. density 1.68 g/cm³(20℃) (DIN51757) ● Solub.in H_2O (20℃)(rigorous reaction) ● pH value ~1.0(5g/l, H_2O, 25℃) ● Melting point 1-2℃ ● Boiling point 105.3℃(1013hPa)

● IMDG UN 1810 PHOSPHORUS OXYCHLORIDE, 8, II
● HS Code 2812 10 11 ● RTECS TH4897000 ● Merck Index 10, 7234

Appearance ····· Colorless & clear liquid, smoking characteristic.
Solubility in benzene ····· To pass test
Density (20℃) ····· 1.684 ~ 1.700
Boiling range (104 ~109℃) ····· Min 90.0%
gnition residue ····· Max 0.3%
Heavy metals (as Pb) ····· Max 0.005%
Sulfate ····· To pass test
Iron(Fe) ····· Max 0.005

Product No.	Packing	Price(₩)
5791	1kg	15,000

Phosphorus Pentoxide Extra Pure

오산화인(무수인산), Phosphoric anhydride, Phosphorous(V) Oxide
● CAS No. 1314-56-3 ● EC No. 215-236-1
● P_2O_5 ● FW 141.94
● Vapour pressure <0.1 hPa (20℃) ● Spec. density 2.30g/cm³(20℃) ● Solub.in H_2O 850g/l (20℃)(rigorous reaction) ● pH value 1(5g/l, H_2O, 20℃) ● Melting point 562℃(closed capillary tube) ● Bulk density ~700kg/m³

● IMDG UN 1807 PHOSPHORUS PENTOXIDE, 8, II
● HS Code 2809 10 00 ● Merck Index 10, 7240

Appearance ····· White powder, hygroscopic.
Assay ····· Min 97.0%
Solubility in water ····· To pass test
Sulfate (SO_4) ····· Max 0.05%
Heavy metals (as Pb) ····· Max 0.03%
Arsenic (As) ····· Max 0.005%
Substances reducing permanganate ····· To pass test

Product No.	Packing	Price(₩)
1612	500g	16,500
2321	1kg	28,500
2322	20kg	85,000

Phosphorus Red — CP

적인
● CAS No. 7723-14-0 ● EC No. 231-768-7
● P ● FW 30.97

● Vapour pressure <0.1 hPa (20℃) ● Spec. density 2.2 g/cm³ ● Solub. in H_2O (20℃) insoluble ● Melting point 585℃ ● Bulk density 1100kg/m³ ● Ignition temp. 260℃

● IMDG UN 1338 PHOSPHORUS, AMORPHOUS, 4.1, III
● HS Code 2804 70 00 ● RTECS TH3495000 ● 3류 황린 20kg
● Merck Index 10, 7231

Appearance ····· Dark red powder, no odor.
Assay ····· Min 97.0%
Loss on drying ····· Max 0.3%

Product No.	Packing	Price(₩)
1614	500g	33,000

Phosphorus Red — Indicator

Product No.	Packing	Price(₩)
2326	500g	33,000

Phosphoryl Chloride → *go to Phosphorus Oxychloride*

NEW

Phosphotungstic Acid — Extra Pure

포스포텅스텐산, 12-Tungsto(VI)phosphoric acid hydrate
● CAS No. 12501-23-4 ● EC No. 215-682-7
● $H_3[P(W_3O_{10})_4]$ x H_2O ● FW 2880.05(anhydrous basis)

● Solub. in H_2O (20 ℃) soluble ● pH value 1.3 (20 g/l, H_2O, 20 ℃) ● Melting point 107 ℃ ● Bulk density ~ 960 kg/m³

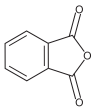
● IMDG UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (TUNGSTOPHOSPHORIC ACID), 8, II ● HS Code 2811 19 80 ● Merck Index 10, 7249

Appearance ····· White or cream crystals or crystalline powder.
Water insoluble metter ····· Max 0.01%
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.01%
Total Nitrogen (as N) ····· Max 0.005%
Lead (Pb) ····· Max 0.005%
Iron (Fe) ····· Max 0.002%
Copper (Cu) ····· Max 0.001%
Loss on ignition (750℃) ····· Max 17.0%

Product No.	Packing	Price(₩)
4925	25g	11,500

Phthalic acid dibutyl ester → *go to Dibutyl Phthalate*

Phthalic anhydride — Extra Pure



프탈산무수, 1-2-Benzenedicarbonic acid anhydride
● CAS No. 85-44-9 ● EC No. 201-607-5
● $C_8H_4O_3$ ● FW 148.12

● Vapour pressure <0.01 hPa (20℃) ● Spec. density 1.527 g/cm³(20℃) ● Explosive limit 1.7-10.5Vol% ● Flash point 152℃(DIN51758) ● Solub.in H_2O 6g/l (20℃)(slow decomposition) ● pH value 2 (6g/l, H_2O, 20℃) ● Melting point 131℃ ● Bulk density 500-700kg/m³ ● Boiling point 285℃ (1013hPa) ● Ignition temp. 580℃

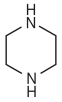
● IMDG UN 2214 PHTHALIC ANHYDRIDE, 8, III
● HS Code 2917 35 00 ● RTECS TI3150000 ● Merck Index 10, 7256

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in ethanol ····· To pass test
Solubility in NaOH Solution ····· To pass test
Melting point ····· 130 ~ 133℃
Ignition residue (as Sulfate) ····· Max 0.02%
Total Chlorine ····· Max 0.005%
Total Sulfur ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.001%

Product No.	Packing	Price(₩)
1615	500g	7,500
2328	20kg	100,000

NEW

Piperazine anhydrous — Extra Pure



무수피퍼라진, Hexanhydropyrazine
● CAS No. 110-85-0 ● EC No. 612-057-00-4
● $C_4H_{10}N_2$ ● FW 86.14

● Vapor pressure 〈 – 10 hPa (20 ℃) ● Spec. density 1.1 g/cm³ (20 ℃) ● Solub. in H_2O 150 g/l (20 ℃) ● Melting point 108 – 111 ℃ ● pH value 12 (150 g/l, H_2O, 20 ℃) ● Explosive limit 4 – 14 %(V) ● Flash point 65 ℃ ● Ignition temp. 320 ℃ DIN 51794 ● Boiling point 145 – 146 ℃ (1013 hPa) ● Bulk density ~ 400 kg/m³

● IMDG UN 2579 PIPERAZINE, 8, III ● HS Code 2933 59 95
● RTECS TK7800000 ● Merck Index 10, 7336

Product No.	Packing	Price(₩)
5195	500g	33,000

Polyethylene Glycol 200 — Extra Pure

폴리에틸렌글리콜 200, P.E.G 200
● CAS No. 25322-68-3
● $H(CH_2CH_2O)nOH$

● Vapour pressure <0.01 hPa(20℃) ● Spec. density ~1.124 g/cm³(20℃) ● Flash point 180℃o.c. ● Solub. in H_2O 70g/l(20℃) ● pH value 5-7(100g/l, H_2O, 20℃) ● Melting point -50℃ ● Boiling point >150℃(1013hPa) ● Ignition temp. 350℃(DIN51794)

● IMDG No Dangerous Good
● HS Code 3907 20 11 ● RTECS TQ3600000 ● Merck Index 10, 7441

Appearance ····· Colorless & clear iquid, dense & sticky.
Density (20℃) ····· Min 1.12 g/ml
Water ····· Max 1.0%
Average moleculer weight ····· 190 ~ 210

Product No.	Packing	Price(₩)
2277	500g	8,800
2278	20kg	150,000

P

Polyethylene Glycol 400 — Extra Pure

폴리에틸렌글리콜 400, P.E.G 400
- CAS No. 25322-68-3
- $H(CH_2CH_2O)nOH$

- Vapour pressure <0.1 hPa(20℃) • Spec. density ~1.13 g/cm³(20℃) • Flash point 240℃ o.c. • Solub.in H_2O (20℃) soluble • pH value 5-7(100g/l, H_2O, 20℃) • Melting point 4-8℃ • Boiling point >200℃(1013hPa) • Kin. viscosity 97-110 (20℃) • Ignition temp. 360℃(DIN51794)

- IMDG No Dangerous Good
- HS Code 3907 20 11 • RTECS TQ3675000 • Merck Index 10, 7441

Appearance ····· Colorless & clear iquid, dense & sticky.
Density (20℃) ····· 1.110 ~ 1.14g/ml
pH (5%, 25℃) ····· 4.0 ~ 7.0
Acidity ····· To pass test
Water ····· Max 1.0%
Ignition residue (as Sulfate) ····· Max 0.1%
Average moleculer weight ····· 380 ~ 420

Product No.	Packing	Price(₩)
2279	1kg	12,500
2280	20kg	131,000

Polyethylene Glycol 600

폴리에틸렌글리콜 600, P.E.G 600
- CAS No. 25322-68-3
- $H(CH_2CH_2O)nOH$

- Vapour pressure <0.1 hPa(20℃) • Spec. density ~1.13 g/cm³(20℃) • Flash point 260℃ o.c. • Solub.in H_2O (20℃) soluble • pH value 5-7(100g/l, H_2O, 20℃) • Melting point 17-22℃ • Ignition temp. >320℃(DIN51794)

- IMDG No Dangerous Good
- HS Code 3907 20 11 • RTECS TQ9800000 • Merck Index 10, 7441

Polyethylene Glycol 600 — Extra Pure

Appearance ····· Colorless & clear iquid, dense & sticky.
Freezing point ····· 20.0 ~ 25.0℃
Average moleculer weight ····· 570 ~ 630

Product No.	Packing	Price(₩)
2286	500g	8,800

Polyethylene Glycol 600 — CP

Product No.	Packing	Price(₩)
1623	20kg	120,000

Polyethylene Glycol 1500 — CP

폴리에틸렌글리콜 1500, P.E.G 1500
- CAS No. 25322-68-3
- $H(CH_2CH_2O)_nOH$

- Vapour pressure <0.01 hPa(20℃) • Spec. density ~1.2 g/cm³(20℃) • Flash point 260℃ • Solub.in H_2O 650g/l(20℃) • pH value 4-7(100g/l, H_2O, 20℃) • Melting point 44-48℃ • Bulk density 400-500kg/m³ • Ignition temp. 420℃

- IMDG No Dangerous Good
- HS Code 3404 20 00 • Merck Index 10, 7441

Product No.	Packing	Price(₩)
1624	500g	8,800

Polyethylene Glycol 4000 — Extra Pure

폴리에틸렌글리콜 4000, P.E.G 4000
- CAS No. 25322-68-3
- $H(CH_2CH_2O)nOH$

- Vapour pressure <0.01 hPa(20℃) • Spec. density ~1.2 g/cm³(20℃) • Flash point 270℃ o.c. • Solub.in H_2O 500g/l(20℃) • pH value 5-7(100g/l, H_2O, 20℃) • Melting point 53-58℃ • Bulk density 400-500kg/m³ • Ignition temp. >320℃(DIN51794)

- IMDG No Dangerous Good
- HS Code 3404 20 00 • RTECS TQ4050000 • Merck Index 10, 7441

Product No.	Packing	Price(₩)
1625	500g	8,800
2282	20kg	120,000

Polyethylene Glycol 6000 — Extra Pure

폴리에틸렌글리콜 6000, P.E.G 6000
- CAS No. 25322-68-3
- $H(CH_2CH_2O)nOH$

- Vapour pressure <0.01 hPa(20℃) • Solub.in H_2O 550g/l(20℃) • pH value 5-7(100g/l, H_2O, 20℃) • Melting point 58-63℃ • Ignition temp. 420℃

- IMDG No Dangerous Good
- HS Code 3404 20 00 • Merck Index 10, 7441

Appearance ····· White paraffine-like lump.
Melting point ····· 56 ~ 64℃
pH (5 w/v %, 25℃) ····· 4.5 ~ 7.5
Solubility in water ····· To pass test
Acidity ····· To pass test
Water ····· Max 1.0%
Ignition residue (as Sulfate) ····· Max 0.25%
Average moleculer weight ····· 7400 ~ 9300

Product No.	Packing	Price(₩)
1626	500g	8,800
1627	20kg	225,000

Polyethylene Glycol 8000 — CP

폴리에틸렌글리콜 8000, P.E.G 8000
- CAS No. 25322-68-3
- $H(CH_2CH_2O)nOH$

Product No.	Packing	Price(₩)
2954	500g	8,800

Polyoxyethylene octylphenyl ether → *go to Triton X-100*

Polyoxyethylene sorbitan monolaurate → *go to Tween 20*

Polyoxyethylene sorbitan monooleate → *go to Tween 80*

Polyoxyethylene sorbitan monopalmitate → *go to Tween 40*

Polyoxyethylene sorbitan monostearate → *go to Tween 60*

NEW

Polyphosphoric Acid — Extra Pure

폴리인산, Hexaphos
- CAS No. 8017-16-1 • EC No. 232-417-0
- $H_{n+2}P_nO_{3n+1}$

- Vapor pressure 2 hPa (20 °C) • Spec. density 2.05 g/cm³ (20 °C) • Solub. in H_2O (20 °C) soluble,Hydrolysis • pH value (H_2O, 20 °C) acidic,Hydrolysis • Melting point −20 °C • Boiling point 530 °C (1013 hPa)

- IMDG UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (POLYPHOSPHORIC ACID), 8, II • HS Code 2809 20 00 • Merck Index 10, 7228

Product No.	Packing	Price(₩)
5196	500g	34,500

Polyvinyl Alcohol 500 — GR

폴리비닐알콜500
- CAS No. 9002-89-5
- $[-CH(OH)CH_2-]_n$ • FW 22,000

- Spec. density 1.3 g/cm³(20℃) • Solub.in H_2O 139g/l (20℃) soluble • pH value 3.5-7.0 (40 g/l, H_2O, 20 ℃) • Ignition temp. 450℃

- IMDG No Dangerous Good
- HS Code 3905 30 00

Appearance ····· White to pale yellow colored particle or powder.
Solubility in water ····· To pass test
Loss on drying(at.105℃,3hr.) ····· Max 10.0%
Ignition residue (as Sulfate) ····· Max 1.0%
Absorption spectrometry suitability ····· To pass test
Degree of Saponification (mol) ····· 86.5 ~ 89.0%

Product No.	Packing	Price(₩)
1628	500g	9,800

Polyvinyl Alcohol 1500

폴리비닐알콜1500
- CAS No. 9002-89-5
- $[-CH(OH)CH_2-]_n$ • FW 66,000

Appearance ····· White to pale yellow colored particle or powder.

Polyvinyl Alcohol 1500 — CP

Product No.	Packing	Price(₩)
1630	500g	9,800

Polyvinyl Alcohol 1500 — Extra Pure

Product No.	Packing	Price(₩)
5560	500g	9,800

NEW

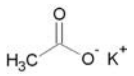
Polyvinyl pyrrolidone — Extra Pure

폴리비닐피롤리돈
- CAS No. 9003-39-8
- $(C_6H_9NO)n$

Appearance ····· White to Yellowish White powder.
Viscosity (25℃) ····· About 2.4
Resiual monomer content ····· Max 0.8%
Residue after ignition (as SO_4) ····· Max 0.02%
Solubility in water ····· To pass test

Product No.	Packing	Price(₩)
4786	1kg	72,000

Potassium Acetate — Extra Pure



아세트산칼륨
- CAS No. 127-08-2 • EC No. 204-822-2
- CH_3COOK • FW 98.15

- Spec. density 1.57 g/cm³(25℃) • Solub.in H_2O 2530g/l (20℃) • pH value 7.5-8.5 (50g/l, H_2O, 20℃) • Melting point 292 ℃ • Bulk density ~500kg/m³

- IMDG No Dangerous Good
- HS Code 2915 29 00 • Merck Index 10, 7474

Appearance ····· White granule or powder, deliquescent.
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 7.5 ~ 9.0
Loss on drying (at 150 ℃) ····· Max 5.0%
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.01%
Lead (Pb) ····· Max 0.002%
Iron (Fe) ····· Max 20ppm
Assay ····· Min 95.0%

Product No.	Packing	Price(₩)
1632	500g	8,800
2334	1kg	13,800
1633	25kg	187,500

Potassium Aluminium Sulfate — CP

칼륨명반, Potassium alum sulfate
- CAS No. 7784-24-9 • EC No. 233-141-3
- $AlK(SO_4)_2 \cdot 12H_2O$ • FW 474.39

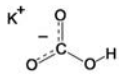
- Spec. density 1.75 g/cm³(20℃) • Solub.in H_2O 139g/l (20℃) • pH value 3.0-3.5 (100g/l, H_2O, 20℃) • Melting point 92.5℃ • Bulk density ~900kg/m³

- IMDG No Dangerous Good
- HS Code 2833 30 00 • Merck Index 10, 356

Appearance ····· Crystal or white crystalline powder.
Asaay ····· Min. 99.0%
Chloride (Cl) ····· Max. 0.005%
Heavy metals(as Pb) ····· Max. 0.005%

Product No.	Packing	Price(₩)
657	500g	6,900
659	1kg	10,000

Potassium Bicarbonate — Extra Pure



탄산수소칼륨, Potassium Hydrogen Carbonate
- CAS No. 298-14-6 • EC No. 206-059-0
- $KHCO_3$ • FW 100.12

- Spec. density 2.17 g/cm³(20℃) • Solub.in H_2O 333g/l (20℃) • pH value 8.0-8.6(50g/l, H_2O, 20℃) • Bulk density 900-1100kg/m³

- IMDG No Dangerous Good
- HS Code 2836 40 00 • RTECS FG1840000 • Merck Index 10, 7480

Appearance ····· White crystal or crystalline powder.
Assay ····· 99.5 ~ 100.5%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.005%
Sulfate(SO_4) ····· Max 0.005%
Heavy metals (as Pb) ····· Max 0.001%
Sodium ····· To pass test

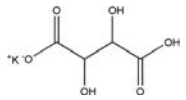
Product No.	Packing	Price(₩)
483	500g	8,800
2337	25kg	Call

P

P

Potassium Biphthalate → *go to Potassium Hydrogen Phthalate*

Potassium Bitartrate — Extra Pure



중주석산칼륨, Potassium Hydrogen Tartrate
● CAS No. 868-14-4 ● EC No. 212-769-1
● HOOCCH(OH)CH(OH)COOK ● FW 188.18

● Solub.in H_2O 5.7g/l (20℃) ● pH value 3.4-3.7(20℃) (saturated solution) ● Melting point ~250℃ (decomposition) ● Bulk density ~720kg/m³

● IMDG No Dangerous Good
● HS Code 2918 13 00

Appearance ····· White crystalline powder.
Assay ····· Min 98.5%
Solubility in NH_4OH ····· To pass test
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.02%
Sodium ····· To pass test
Calcium(Ca) ····· Max 0.01%
Lead (Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.002%
Ammonium (NH_4) ····· Max 0.002%

Product No.	Packing	Price(₩)
485	500g	11,000

Potassium Bromate — Extra Pure

브로민산칼륨
● CAS No. 7758-01-2 ● EC No. 231-829-8
● $KBrO_3$ ● FW 167.01

● Spec. density 3.27 g/cm³(20℃) ● Solub.in H_2O 69g/l (20℃) ● pH value 5-9 (50g/l, H_2O, 20℃) ● Melting point 350℃ ● Bulk density ~1400kg/m³

● IMDG UN 1484 POTASSIUM BROMATE, 5.1, II
● HS Code 2829 90 40 ● 1류 브롬산류 300kg ● Merck Index 10, 7490

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 5.0 ~ 8.0
Bromide ····· To pass test
Sulfate (SO_4) ····· Max 0.01%
Total Nitrogen (as N) ····· Max 0.003%
Heavy metals (as Pb) ····· Max 0.001%
Sodium ····· To pass test
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
1635	500g	19,500

N/10 - Potassium Bromate (1/60M) — Normal

N/10 브로민산칼륨(1/16M)

Product No.	Packing	Price(₩)
346	500㎖	9,800

Potassium Bromide — Extra Pure

브로민화칼륨
● CAS No. 7758-02-3 ● EC No. 231-830-3
● KBr ● FW 119.01

● Vapour pressure 1.3 hPa (795℃) ● Spec. density 2.75 g/cm³(20℃) ● Solub.in H_2O 650g/l (20℃) ● pH value 5.5-8.5 (50g/l, H_2O, 20℃) ● Melting point 730℃ ● Bulk density ~900-1000kg/m³ ● Boiling point 1435℃

● IMDG No Dangerous Good
● HS Code 2827 51 00 ● RTECS TS7650000 ● Merck Index 10, 7491

Appearance ····· White crystal or crystalline powder.
Assay (after dried) ····· 99.0 ~ 101.0%
Solubility in water ····· To pass test
Loss on drying (at.105℃,4hr.) ····· Max 0.5%
pH (5 w/v %, 25℃) ····· 5.0 ~ 8.0
Bromate ····· To pass test
Chloride (Cl) ····· Max 0.3%
Iodine ····· To pass test
Sulfate (SO_4) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.001%
Sodium ····· To pass test
Magnesium (Mg) ····· Max 0.003%
Calcium (Ca) ····· Max 0.003ppb

Product No.	Packing	Price(₩)
347	500g	12,500
348	1kg	21,000

Potassium Carbonate, Anhydrous — Extra Pure

탄산칼륨
● CAS No. 584-08-7 ● EC No. 209-529-3
● K_2CO_3 ● FW 138.21

● Spec. density 2.43 g/cm³(55℃) ● Solub.in H_2O 1120g/l (20℃) ● pH value ~11.5-12.5 (50g/l, H_2O, 20℃) ● Melting point 891℃ ● Bulk density ~750kg/m³

● IMDG No Dangerous Good
● HS Code 2836 40 00 ● RTECS TS7750000 ● Merck Index 10, 7493

Appearance ····· White crystal, hygroscopic.
Assay (after ingition) ····· Min. 99.5%
Solubility in water ····· To pass test
Ignition loss ····· Max 2.0%
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.01%
Sodium ····· To pass test
Heavy metals (as Pb) ····· Max. 0.002%
Iron(Fe) ····· Max. 0.002%

Product No.	Packing	Price(₩)
351	500g	7,000
3794	1kg	10,000
352	25kg	94,500

Potassium Chlorate — CP

염소산칼륨
● CAS No. 3811-04-9 ● EC No. 223-289-7
● $KClO_3$ ● FW 122.55

● Spec. density 2.32 g/cm³(20℃) ● Solub.in H_2O 73g/l (20℃) ● pH value ~5.6 (73g/l, H_2O, 20℃) ● Melting point 356℃ ● Bulk density ~1200-1400kg/m³ ● Boiling point 400℃(decomposition)

● IMDG UN 1485 POTASSIUM CHLORATE, 5.1, II
● HS Code 2829 19 00 ● 1류 염소산류 50kg ● Merck Index 10, 7494

Product No.	Packing	Price(₩)
3548	500g	9,800
3072	25kg	100,000

Potassium Chloride — Extra Pure

염화칼륨
● CAS No. 7447-40-7 ● EC No. 231-211-8
● KCl ● FW 74.55

● Spec. density 1.98 g/cm³(20℃) ● Solub.in H_2O 347g/l (20℃) ● pH value 5.5-8.0 (50g/l, H_2O, 25℃) ● Melting point 773℃ ● Bulk density ~1000kg/m³ ● Boiling point 1413℃(1013hPa)

● IMDG No Dangerous Good
● HS Code 3104 20 90 ● RTECS TS8050000 ● Merck Index 10, 7495

Appearance	White crystal or crystalline powder.
Assay	Min 99.0%
Solubility in water	To pass test
Loss on drying (at.110℃,2hr.)	0.5%
pH (5 w/v %, 25℃)	5.0 ~ 8.0
Iodine & Bromine	To pass test
Sulfate (SO_4)	Max 0.005%
Sodium	To pass test
Magnesium (Mg)	Max 0.005%
Calcium(Ca)	Max 0.005%
Barium (Ba)	Max 0.002%
Lead (Pb)	Max 0.002%
Iron (Fe)	Max 0.001%

Product No.	Packing	Price(₩)
370	500g	5,500
372	1kg	9,400
373	25kg	106,300

3.3M - Potassium Chloride (3.3M) — Solution

3.3M염화칼륨
● CAS No. 7447-40-7

Product No.	Packing	Price(₩)
382	500㎖	8,800

N/10 - Potassium Chloride (0.1M) — Normal

N/10 염화칼륨(0.1M)

Product No.	Packing	Price(₩)
385	500㎖	5,000
387	1ℓ	7,500

Potassium Chromate — GR

크롬산칼륨
● CAS No. 7789-00-6 ● EC No. 231-140-5
● K_2CrO_4 ● FW 194.20

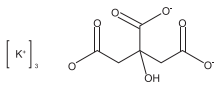
● Spec. density 2.73 g/cm³(18℃) ● Solub.in H_2O 637g/l (20℃) ● pH value 9.0-9.8 (50g/l, H_2O, 25℃) ● Melting point 985℃ ● Bulk density ~1400kg/m³ ● Boiling point 1000℃

● IMDG UN 3288 TOXIC SOLID, INORGANIC, N.O.S. (POTASSIUM CHROMATE), 6.1, II
● HS Code 2841 50 00 ● Merck Index 10, 7496

Appearance	Yellow crystal.
Assay	Min 99.0%
Solubility in water	To pass test
pH (5 w/v %, 25℃)	8.5 ~ 9.8
Chloride (Cl)	Max 0.005%
Sulfate (SO_4)	Max 0.03%
Sodium (Na)	Max 0.05%
Copper (Cu)	Max 0.001%
Calcium(Ca)	Max 0.005%
Lead (Pb)	Max 0.001%
Iron (Fe)	Max 0.002%

Product No.	Packing	Price(₩)
393	25g	7,000
391	500g	26,300

Potassium Citrate monohydrate — Extra Pure



시트르산칼륨(구연산칼륨),
Tripotassium citrate monohydrate
● CAS No. 6100-05-6
● EC No. 212-755-5
● $C_6H_5K_3O_7 \cdot H_2O$ ● FW 324.42

● Spec. density 1.98 g/cm³(20℃) ● Solub. in H_2O 640g/l (25℃) ● pH value 7.5-9.0 (50g/l, H_2O, 20℃) ● Melting point >180℃ (decomposition) ● Bulk density ~950kg/m³

● IMDG No Dangerous Good
● HS Code 2918 15 00 ● Merck Index 10, 7494

Appearance	White crystal or crystalline powder.
Solubility in water	To pass test
Assay	Min 99.0%
pH(5%)	7.8 ~ 8.6
Iron (Fe)	Max 0.002%
Heavy metals (asPb)	Max 0.003%
Chloride (Cl)	Max 0.01%
Ammonium (NH_4)	Max 0.006%
Sulfate (as SO_4)	Max 0.02%
Calcium(Ca)	Max 0.02%

Product No.	Packing	Price(₩)
401	500g	8,800
402	1kg	13,800
403	25kg	200,000

Potassium Cyanide — Extra Pure

사이안화칼륨, Cyanogen potassium
● CAS No. 151-50-8 ● EC No. 205-792-3
● KCN ● FW 65.12

● Spec. density 1.55 g/cm³(20℃) ● Solub.in H_2O 716g/l (25℃) ● pH value ~11-12 (20g/l, H_2O, 20℃) ● Melting point 634℃ ● Bulk density ~750kg/m³ ● Boiling point 1625℃(1013hPa)

● IMDG UN 1680 POTASSIUM CYANIDE, SOLID, 6.1, I, Marine Pollutant:P
● HS Code 2829 2837 19 00 ● RTECS TS8750000 ● Merck Index 10, 7501

Appearance	Colorless or white crystalline powder or lump, hygroscopic.
Assay	Min 98.0%
Solubility in water	To pass test
Carbonate (CO_3)	Max 0.7%
Chloride (Cl)	Max 0.05%
Sulfate (SO_4)	Max 0.02%
Sulfide (S)	Max 0.002%
Thiocyanate (SCN)	Max 0.02%
Sodium (Na)	Max 1.0%
Lead (Pb)	Max 0.002ppm
Iron (Fe)	Max 0.003%

Product No.	Packing	Price(₩)
2348	500g	11,300
411	1kg	18,800

P

Potassium Dichromate — Extra Pure

중크롬산칼륨, Potassium bichromate, Potassium pyrochromate
● CAS No. 7778-50-9 ● EC No. 231-906-6
● $K_2Cr_2O_7$ ● FW 294.18

● Spec. density 2.69g/cm³ (20℃) ● Solub. in H_2O 130g/l (20℃) ● pH value 3.57 (100g/l, H_2O) ● Melting point 398℃ ● Bulk density 1250kg/m³ ● Boiling point > 500℃ (1013hPa)

● IMDG UN 3288 TOXIC SOLID, INORGANIC, N.O.S. (POTASSIUM DICHROMATE), 6.1, II ● HS Code 2841 50 00
● RTECS HX7680000 ● 1류 중크롬산염류 1000kg ● Merck Index 10, 7502

Appearance ····· Orange crystal or crystalline powder.
Assay ····· Min 99.5%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.05%
Calcium(Ca) ····· Max 0.01%
Iron (Fe) ····· Max 0.001%
Aluminium (Al) ····· Max 0.01%

Product No.	Packing	Price(₩)
417	500g	10,000
422	4kg	17,500

1N - Potassium Dichromate (1/6M) — Normal

1N중크롬산칼륨(1/6M)

Product No.	Packing	Price(₩)
446	500㎖	7,500

N/10 - Potassium Dichromate (1/60M) — Normal

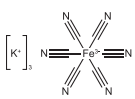
N/10중크롬산칼륨(1/60M)

Product No.	Packing	Price(₩)
450	500㎖	7,500
452	1ℓ	11,000

Potassium dihydrogen phosphate
→ *go to Potassium Phosphate monobasic*

Potassium diphosphate → *go to Potassium Pyrophosphate*

Potassium Ferricyanide — Extra Pure



페리사이안화칼륨(적혈염), Potassium hexacyanoferrate(III)
● CAS No. 13746-66-2 ● EC No. 237-323-3
● $K_3Fe(CN)_6$ ● FW 329.26

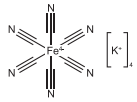
● Spec. density 1.85g/cm³ (20℃) ● Solub. in H_2O 464 g/l (20℃) ● pH value ~6 (50g/l, H_2O, 20℃) ● Bulk density ~ 900 – 1000kg/m³

● IMDG No Dangerous Good ● HS Code 2837 20 00
● RTECS LJ8225000 ● Merck Index 10, 7505

Appearance ····· Glossy, dark red crystal.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Ferrocyanide [$Fe(CN)_6$] ····· Max 0.05%
Sodium ····· To pass test

Product No.	Packing	Price(₩)
462	500g	20,000

Potassium Ferrocyanide — Extra Pure



페로사이안화칼륨(황혈염), Potassium hexacyanoferrate(II) trihydrate
● CAS No. 14459-95-1 ● EC No. 237-722-2
● $K_4Fe(CN)_6 \cdot 3H_2O$ ● FW 422.39

● Solub. in H_2O 289g/l (20℃) ● pH value ~9.5 (100g/l, H_2O, 20℃)(anhydrous substance) ● Melting point ~ 70℃ (release of crystalline water) ● Bulk density ~ 950 – 1050kg/m³

● IMDG No Dangerous Good ● HS Code 2837 20 00
● Merck Index 10, 7506

Appearance ····· Yellow crystal.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.01%
Sodium ····· To pass test

Product No.	Packing	Price(₩)
469	500g	16,300

Potassium Fluoride — Extra Pure

플루오르화칼륨
● CAS No. 7789-23-3 ● EC No. 232-151-5 ● KF ● FW 58.09

● Vapour pressure 1.3hPa (885℃) ● Spec. density 2.48g/cm³ (20℃) ● Solub. in H_2O 923g/l (20℃) ● pH value 7 – 9 (50g/l, H_2O, 18℃) ● Melting point 860℃ ● Bulk density ~ 400kg/m³ ● Boiling point 1500℃

● IMDG UN 1812 POTASSIUM FLUORIDE, SOLID, 6.1, III ● HS Code 2826 19 90
● RTECS TT0700000

Appearance ····· White powder, hygroscopic.
Assay (after dried) ····· Min 95.0%
Solubility in water ····· To pass test
Ignition loss ····· Max 3.0%
Acidity (as HF) ····· Max 0.4%
Alkalinity (as K_2CO_3) ····· Max 0.5%
Carbonate (CO_3) ····· To pass test
Chloride (Cl) ····· Max 0.06%
Sulfate (SO_4) ····· Max 0.06%
Sodium ····· To pass test
Lead (Pb) ····· Max 0.03%
Iron (Fe) ····· Max 0.02%
Potassium silicofluoride(K_2SiF_6) ····· Max 1.0

Product No.	Packing	Price(₩)
474	500g	16,500

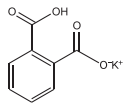
Potassium hexacyanoferrate(II) → *go to Potassium Ferrocyanide*

Potassium hexacyanoferrate(III) → *go to Potassium Ferricyanide*

Potassium hydrogen carbonate → *go to Potassium Bicarbonate*

NEW

Potassium Hydrogen Phthalate — Extra Pure



중프탈산칼륨, Potassium Biphthalate
● CAS No. 877-24-7 ● EC No. 212-889-4
● $(COOH)C_6H_4COOK$ ● FW 204.22

● Spec. density 1.636 g/cm³ ● Solub. in H_2O 80 g/ℓ (20℃) ● pH value 4.0 (50 g/ℓ, H_2O, 20℃) ● Melting point 295~300℃

● IMDG No Dangerous Good ● HS Code 2917 39 95
● RTECS CZ4326000

Appearance	White crystalline powder.
Assay	Min 99.0
Solubility in water	To pass test
Loss on drying (110℃)	Max 0.02%
Chloride (Cl)	Max 0.002%
Sulfate (SO_4)	Max 0.005%
Copper (Cu)	Max 5 ppm
Heavy metals (as Pb)	Max 5 ppm
Sodium (Na)	Max 0.01%
Iron (Fe)	Max 0.0005%

Product No.	Packing	Price(₩)
4031	500g	16,500
4032	1kg	27,500

Potassium hydrogen tartate → *go to Potassium Bitartrate*

Potassium Hydroxide

수산화칼륨, Potash caustic
● CAS No. 1310-58-3 ● EC No. 215-181-3 ● KOH ● FW 56.11

● Spec. density 2.04g/cm³ (20℃) ● Solub. in H_2O 1130g/l (20℃) ● pH value ~14 (56g/l, H_2O, 20℃) ● Melting point 360℃ ● Boiling point 1320℃

● IMDG UN 1813 POTASSIUM HYDROXIDE, SOLID, 8, II ● HS Code 2815 20 10
● RTECS TT2100000 ● Merck Index 10, 7519

Potassium Hydroxide — Extra Pure

Appearance	White massive stem-shape or granule.
Assay	Min 85.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.01%
Silicate (SiO_2)	Max 0.04%
Sulfate (SO_4)	Max 0.006%
Total Nitrogen (as N)	Max 0.002%
Sodium	To pass test
Aluminium (Al)	Max 0.005%
Lead (Pb)	Max 0.001%
Iron (Fe)	Max 0.002%
Nickel (Ni)	Max 0.002%
Potassium carbonate (K_2CO_3)	Max 2.0%

Product No.	Packing	Price(₩)
39	500g	5,000
40	1kg	7,500
41	25kg	81,300

Potassium Hydroxide — GR

Appearance	White massive stem-shape or granule.
Assay	85.0 ~ 87.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.005%
Phosphate(PO_4)	Max 0.001%
Silicate (SiO_2)	Max 0.002%
Sulfate (SO_4)	Max 0.002%
Total Nitrogen (as N)	Max 0.001%
Sodium (Na)	Max 0.5%
Magnesium (Mg)	Max 5ppm
Calcium (Ca)	Max 0.002%
Zinc (Zn)	Max 0.001%
Aluminium (Al)	Max 0.002%
lead (Pb)	Max 5ppm
Iron (Fe)	Max 5ppm
Nickel (Ni)	Max 0.001%
Potassium carbonate (K_2CO_3)	Max 1.5%

Product No.	Packing	Price(₩)
38	500g	8,800
3609	1kg	13,800
1745	15kg	150,000

Potassium Hydroxide 45% — EL

수산화칼륨

Assay (as KOH)	45.0 ± 0.25%
Potassium Carbonate (as K_2CO_3)	Max 1.0%
Chloride (Cl)	Max 5ppm
Sulfate (SO_4)	Max 5ppm
Phosphate (PO_4)	Max 5ppm
Silicate (as SiO_2)	Max 50ppm
Heavy metals (as Pb)	Max 0.0005%
Total nitrogen (N)	Max 0.0003%
Aluminium (Al)	Max 10ppm
Calcium (Ca)	Max 10ppm
Iron (Fe)	Max 5ppm
Sodium (Na)	Max 5000ppm

Product No.	Packing	Price(₩)
2853	25kg	73,800

Potassium Hydroxide 30% Solution — Solution

수산화칼륨용액

Assay	Min 30%

Product No.	Packing	Price(₩)
505	1ℓ	4,400
3517	1kg	4,400

1N - Potassium Hydroxide (1M) — Normal

1N(1M) 수산화칼륨

Appearance	To pass test
Factor (at 20℃)	1.000 ~ 1.005

Product No.	Packing	Price(₩)
44	1ℓ	8,800

P

N/2 Potassium Hydroxide (0.5M) Normal

N/2(0.5M) 수산화칼륨

Appearance ····· To pass test
Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
45	500㎖	5,000
3503	1 ℓ	8,800

N/10 - Potassium Hydroxide (0.1M) Normal

N/10(0.1M) 수산화칼륨

Appearance ····· To pass test
Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
47	500㎖	5,000
48	1 ℓ	8,800

N/10 - Potassium Hydroxide (Ethanol sol.)(0.1M) Normal

N/10(0.1M) 수산화칼륨(에탄올용액)

Appearance ····· To pass test
Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
46	500㎖	9,800

Potassium Iodate Extra Pure

아이오딘화칼륨
● CAS No. 7758-05-6 ● EC No. 231-831-9 ● KIO_3 ● FW 214.00

● Spec. density 3.98g/cm³ (20℃) ● Solub. in H_2O 92g/l (25℃) ● pH value ~6 (50g/l, H_2O, 20℃) ● Melting point 560℃ ● Bulk density ~ 2000kg/m³

● IMDG UN 1479 OXIDIZING SOLID, N.O.S. (POTASSIUM IODATE), 5.1, II
● HS Code 2829 90 80 ● RTECS NN1350000 ● Merck Index 10, 7521

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.5%
Solubility in water ····· To pass test
pH (5w/v%,25℃) ····· 5.0 ~ 8.0
Loss on drying (at. 110℃,2hr) ····· Max 0.1%
Sulfate (SO_4) ····· Max 0.02%
Heavy Metals (as Pb) ····· Max 0.003%
Chlorine & Bromine(as Cl) ····· Max 0.05%
Iron(Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
509	500g	52,000

N/10 Potassium Iodate (1/60M) Normal

N/10 아이오딘화칼륨

Product No.	Packing	Price(₩)
513	500㎖	12,000

Potassium Iodide

아이오딘화칼륨(요오드화칼륨)
● CAS No. 7681-11-0 ● EC No. 231-659-4 ● KI ● FW 166.00

● Spec. density 3.13g/cm³ (20℃) ● Solub. in H_2O 1430g/l (20℃) ● pH value ~6.9 (50g/l, H_2O, 20℃) ● Melting point 686℃ ● Bulk density ~ 1500kg/m³ ● Boiling point 1330℃

● IMDG No Dangerous Good ● HS Code 2827 60 00
● RTECS TT2975000 ● Merck Index 10, 7522

Potassium Iodide Extra Pure

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.5%
Solubility in water ····· To pass test
Loss on drying (at. 110℃,2hr) ····· Max 0.4%
pH (5w/v%,25℃) ····· 6.0 ~ 8.0
Chlorine & Bromine ····· Max 0.03%
Iodate & Thiosulfate ····· To pass test
Phosphate (PO_4) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.005%
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 5ppm

Product No.	Packing	Price(₩)
521	500g	65,000
2360	1kg	137,500

Potassium Iodide GR

Product No.	Packing	Price(₩)
4643	1kg	150,000

N/10 Potassium Iodide Normal

N/100아이오딘화칼륨(요오드화칼륨)

Product No.	Packing	Price(₩)
2729	500㎖	12,000

Potassium Metabisulfite GR / AR NEW

메타중아황산칼륨
Potassium Metabisulphite, Dipotassium Disulfite, Potassium pyrosulfite
● CAS No. 16731-55-8 ● EC No. 240-795-3
● $K_2O_5S_2$ ● FW 222.33

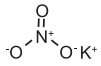
● Spec. density 2.34 g/cm³ (20 ℃) ● Solub. in H_2O 450 g/l (20 ℃) ● pH value 3.0 – 4.5 (50 g/l, H_2O, 20 ℃) ● Melting point 150 ℃ (decomposition) ● Bulk density ~ 1000 – 1300 kg/m³

● IMDG NO Dangerous Good ● HS Code 2832 20 00
● RTECS TT4920000

Appearance ····· White crystalline powder.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.05%
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.002%
Selenium (Se) ····· Max 0.0005%
Arsenic (As) ····· Max 0.0002%

Product No.	Packing	Price(₩)
4941	1kg	11,000

Potassium Nitrate — Extra Pure



질산칼륨, Nitric and potassium salt
● CAS No. 7757-79-1 ● EC No. 231-818-8
● KNO_3 ● FW 101.10

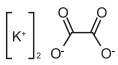
● Spec. density 2.11g/cm³ (20℃) ● Solub. in H_2O 320g/l (20℃) ● pH value 4.5 – 8.5 (50g/l, H_2O, 20℃) ● Melting point 334℃ ● Bulk density ~ 800kg/m³

● IMDG UN 1486 POTASSIUM NITRATE, 5.1, III ● HS Code 2834 21 00
● 1류 질산염류 300kg ● Merck Index 10, 7528

Appearance ····· Colorless crystal or white crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
PH(5%) ····· 5.0~8.0%
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.01%
Sodium ····· To pass test
Calcium(Ca) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.001%
Ammonium (NH_4) ····· Max 0.008%

Product No.	Packing	Price(₩)
525	500g	5,600
528	1kg	10,000
529	25kg	203,100

Potassium Oxalate monohydrate — Extra Pure



옥살산칼륨, Oxalic acid dipotassium salt monohydrate
● CAS No. 6487-48-5 ● EC No. 209-506-8
● $KOCOCOOK \cdot H_2O$ ● FW 184.24

● Vapour pressure (20℃) low ● Spec. density 2.13g/cm³ (20℃) ● Solub. in H_2O 360g/l (20℃) (anhydrous substance) ● pH value 7.0 – 8.5 (50g/l, H_2O, 20℃) ● Bulk density ~ 700 – 1100kg/m³

● IMDG No Dangerous Good ● HS Code 2917 11 00
● Merck Index 10, 7533

Appearance ····· Colorless crystal or white crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Acid salt (KHC_2O_4) ····· Max 0.1%
Basic salt (K_2CO_3) ····· Max 0.1%
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.05%
Sodium (Na) ····· To pass test
Lead (Pb) ····· Max 0.004%
Iron (Fe) ····· Max 0.002%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
539	500g	11,000
540	25kg	218,800

Potassium Permanganate — Extra Pure

과망간산칼륨, Permanganic acid potassium salt
● CAS No. 7722-64-7 ● EC No. 231-760-3 ● $KMnO_4$ ● FW 158.03

● Vapour pressure < 0.01hPa (20℃) ● Spec. density 2.70g/cm³ (20℃) ● Solub. in H_2O 64g/l (20℃) ● pH value ~7 – 9 (20g/l, H_2O, 20℃) ● Melting point > 240℃ (decomposition) ● Bulk density ~ 1300 – 1600kg/m³

● IMDG UN 1490 POTASSIUM PERMANGANATE, 5.1, II ● HS Code 2841 61 00
● 4류 과망간산염류 1000kg ● Merck Index 10, 7537

Appearance ·· Greenish black or purple black colored crystal, metallic gloss.
Insoluble in water ····· Max 0.2
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.02%
Total Nitrogen (as N) ····· Max 0.01%
Assay ····· Min 99.3%

Product No.	Packing	Price(₩)
23	500g	8,800
24	1kg	7,900
1696	25kg	225,000

1N-Potassium Permanganate (0.2M) — Normal

1N(0.2M) 과망간산칼륨

Product No.	Packing	Price(₩)
25	500㎖	7,000
4050	1ℓ	12,000

N/2-Potassium Permanganate (0.1M) — Normal

N/2(0.1M) 과망간산칼륨

Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
26	500㎖	7,000
27	1ℓ	11,000

N/5-Potassium Permanganate (0.04M) — Normal

N/5(0.04M) 과망간산칼륨

Product No.	Packing	Price(₩)
28	500㎖	5,500

N/10-Potassium Permanganate (0.02M) — Normal

N/10(0.02M) 과망간산칼륨

Factor (at 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
29	500㎖	5,000
30	1ℓ	8,800

N/40-Potassium Permanganate (0.005M) — Normal

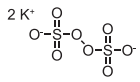
N/40(0.005M) 과망간산칼륨

Product No.	Packing	Price(₩)
32	500㎖	5,000
31	1ℓ	9,400

Potassium peroxodisulfate → *go to Potassium Persulfate*

P

Potassium Persulfate — Extra Pure



과황산칼륨, Potassium peroxodisulfate
● CAS No. 7727-21-1 ● EC No. 231-781-8
● $K_2S_2O_8$ ● FW 270.30

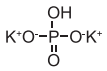
● Spec. density 2.48g/cm³ (20℃) ● Solub. in H_2O 50g/l (20℃) ● pH value ~ 3.2 (50g/l, H_2O, 20℃) ● Melting point 100℃ (decomposition) ● Bulk density ~ 1150kg/m³

● IMDG UN 1492 POTASSIUM PERSULPHATE, 5.1, III ● HS Code 2833 40 00
● RTECS SE0400000 ● 1류 퍼옥소이황산염류, 300kg ● Merck Index 10, 7538

Appearance ····· White to pale yellow colored crystal or powder.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.005%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
106	500g	7,500

Potassium Phosphate, dibasic — Extra Pure



제이인산칼륨, Dipotassium hydrogen phosphate
● CAS No. 7758-11-4 ● EC No. 231-834-5
● K_2HPO_4 ● FW 174.18

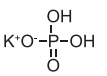
● Spec. density 2.44g/cm³ (20℃) ● Solub. in H_2O 1600 g/l (20℃) ● pH value ~ 9 (10g/l, H_2O, 20℃) ● Bulk density ~ 700 – 1000kg/m³

● IMDG No Dangerous Good ● HS Code 2835 24 00
● RTECS TC5580000 ● Merck Index 10, 7541

Appearance ····· White crystal or crystalline powder, highly hygroscopic.
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 8.7~ 9.4%
Loss on drying (at.105 ℃) ····· Max 3%
Carbonate (CO_3) ····· To pass test
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.08%
Arsenic (As) ····· Max 0.0003%
Sodium (Na) ····· To pass test
Heavy metals (as Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.005%
Assay ····· 98.0 ~ 101.0%

Product No.	Packing	Price(₩)
562	500g	7,500
563	1kg	12,000
564	25kg	150,000

Potassium Phosphate, monobasic — Extra Pure



제일인산칼륨, Potassium dihydrogen phosphate
● CAS No. 7778-77-0 ● EC No. 231-913-4
● KH_2PO_4 ● FW 136.09

● Spec. density 2.34g/cm³ (20℃) ● Solub. in H_2O 222 g/l (20℃) ● pH value ~ 4.4 (50g/l, H_2O, 20℃) ● Melting point ~ 253℃ (decomposition) ● Bulk density ~ 1200kg/m³

● IMDG No Dangerous Good ● HS Code 2835 24 00
● RTECS TC6615500 ● Merck Index 10, 7542

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 4.2 ~ 4.6
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.003%
Sodium ····· To pass test
Arsenic (As) ····· Max 2ppm
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
432	500g	6,500
433	1kg	11,500
434	25kg	175,000

Potassium Phosphate tribasic

제삼인산칼륨
● CAS No. 7778-53-2 ● K_3PO_4 ● FW 212.28

Potassium Phosphate tribasic — Extra Pure

Appearance ····· Colorless to white crystal, lump or white powder.
Assay (after loss on ignition) ····· Min 97.0%
Loss on Ignition ····· Max 23.0%
Solubility in water ····· To pass test
pH (1% Sol.) ····· 11.5 ~ 12.5
Heavy metals (as Pb) ····· Max 30ppm
Lead (Pb) ····· Max 10ppm

Product No.	Packing	Price(₩)
1701	500g	8,800
2368	1kg	13,800

Potassium Phosphate tribasic — CP

Product No.	Packing	Price(₩)
569	500g	8,800

Potassium pyrochromate → *go to Potassium Dichromate*

Potassium Pyrophosphate — Extra Pure

피로인산칼륨, Potassium diphosphate
● CAS No. 7320-34-5 ● $K_4P_2O_7$ ● FW 330.34

Appearance ····· White crystal, powder, granule, hygroscopic.
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.001%
Phosphate (PO_4) ····· To pass test
Sulfate (SO4) ····· Max 0.002%
Lead (Pb) ····· Max 0.001%
Arsenic (As) ····· Max 1ppm

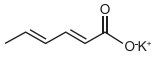
Product No.	Packing	Price(₩)
457	500g	7,500
5947	25kg	212,500

Potassium pyrosulfate → *go to Potassium Sulfate*

Potassium rhodanide → *go to Potassium Thiocyanate*

Potassium sodium tartrate tetrahydrate → *go to Rochelle Salt*

Potassium Sorbate — Extra Pure



솔빈산칼륨, Sorbic acid potassium salt
● CAS No. 24634-61-5 ● EC No. 246-376-1
● $CH_3CH=CHCH=CHCOOK$ ● FW 150.22

● Spec. density 1.36g/cm³ (20℃) ● Solub. in H_2O 1400 g/l (20℃) ● pH value 8 – 11 (1400g/l, H_2O, 20℃) ● Melting point ~ 270℃ (decomposition) ● Bulk density ~ 370kg/m³ ● Ignition temp. > 180℃

● IMDG No Dangerous Good ● HS Code 2916 19 70
● RTECS WG2170000

Appearance ····· White to yellowish brown colored scaled crysta or crystalline powder.
Assay (after dried) ····· 98.0 ~ 101.0%
Solubility in water ····· To pass test
Loss on drying(at.105℃,3hr.) ····· Max 1.0%
Free Alkali ····· To pass test
Chloride (Cl) ····· Max 0.018%
Sulfate (SO_4) ····· Max 0.039%
Heavy metals (Pb) ····· Max. 0.001%
Arsenic (As) ····· Max. 0.0004%

Product No.	Packing	Price(₩)
590	500g	16,300

Potassium Sulfate — Extra Pure

황산칼륨, Potassium pyrosulfate
● CAS No. 7778-80-5 ● EC No. 231-915-5
● K_2SO_4 ● FW 174.25

● Spec. density 2.66g/cm³ (20℃) ● Solub. in H_2O 111g/l (20℃) ● pH value 5.5 – 7.5 (50g/l, H_2O, 20℃) ● Melting point 1069℃ ● Bulk density ~ 800kg/m³ ● Boiling point 1689℃ (1013hPa)

● IMDG No Dangerous Good ● HS Code 3104 30 00
● RTECS TT5900000 ● Merck Index 10, 7559

Appearance ····· Colorless to white crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
pH (5 %) ····· 5.0 ~ 8.0
Chloride (Cl) ····· Max 0.003%
Calcium(Ca) ····· Max 0.006%
Lead (Pb) ····· Max 0.001%
Arsenic (As) ····· Max 1ppm
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
592	500g	5,500
594	1kg	10,000
596	25kg	150,000

Potassium Tartrate hemihydrate — Extra Pure

주석산칼륨
● CAS No. 6100-19-2 ● $2KOOCCH(OH)CH(OH)COOK \cdot 0.5H_2O$ ● FW 470.55

Appearance ····· White crystal or crystalline powder.

Product No.	Packing	Price(₩)
598	500g	13,800

Potassium Thiocyanate — Extra Pure

싸이오사이안산칼륨(로당칼륨), Potassium Rhodanide
● CAS No. 333-20-0 ● EC No. 206-370-1
● KSCN ● FW 97.18

● Vapour pressure < 1hPa (20℃) ● Spec. density 1.89g/cm³ (20℃) ● Solub. in H_2O 208g/l (20℃) ● pH value 5.3 – 8.5 (50g/l, H_2O, 20℃) ● Melting point 175℃ ● Bulk density ~ 750 – 1000kg/m³

● IMDG No Dangerous Good ● HS Code 2842 90 80
● Merck Index 10, 7581

Appearance ····· White crystal, deliquescent.
Assay(after dried) ····· Min 99.0%
Solubility in water ····· To pass test
Loss on drying (at.105℃,4hr.) ····· Max 2.0%
pH (5 w/v %, 25℃) ····· 5.3 ~ 8.5
Chloride (Cl) ····· Max 0.015%
Sulfate (SO_4) ····· Max 0.015%
Ammonium (NH_4) ····· Max 0.025%
Iron(Fe) ····· Max. 0.0004%
Iodine – consuming substances ····· To pass test

Product No.	Packing	Price(₩)
576	500g	12,500

Prethanol — FA

프레타놀

성상 ····· 이 약은 무색의 맑은 액으로 특이한 냄새 및 타는 듯한 맛이 있다. 이 약은 물 또는 에탄올과 섞인다
비중 d 15/15 ····· 0.876 ~ 0.881℃
비소 (As) ····· Max 1.5ppm
중금속 (asPb) ····· Max 10ppm
보존료 함량 ····· 0.025 ~ 0.035%

Product No.	Packing	Price(₩)
602	18 ℓ	57,500

Prethanol-A — FA

프레타놀 A

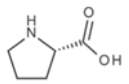
성상 ····· 이 약은 무색의 맑은 액으로 특이한 냄새 및 타는 듯한 맛이 있다. 이 약은 물 또는 에탄올과 섞인다
비중 d 15/15 ····· 0.814 ~ 0.825℃
비소 (As) ····· Max 1.5ppm
중금속 (asPb) ····· Max 10ppm
보존료 함량 ····· 0.025 ~ 0.035%

Product No.	Packing	Price(₩)
2875	1 ℓ	8,100
604	18 ℓ	63,800

Primelic ketone → *go to Cyclohexanone*

P

NEW L(-)-Proline GR



L-프롤린
● CAS No. 147-85-3 ● EC No. 205-702-2
● $C_5H_9NO_2$ ● FW 115.13

● Spec. density 1.35 g/cm³ (25 ℃) ● Solub. in H_2O 1500 g/l (20℃) ● pH value ~ 5 - 7 (100 g/l, H_2O, 20 ℃) ● Melting point 220 - 222 ℃ (decomposition) ● Bulk density ~ 500 kg/m³

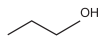
● IMDG NO Dangerous Good ● HS Code 2933 99 80
● RTECS TW3584000 ● Merck Index 10, 7685

Appearance	White ~Yellowish crystal or crystalline powder.
Assay	Min 99.0%
Specific rotation (α) 20 D	-84.0 ~ -86.3
Loss on drying (at 105℃, 3hr)	0.801 ~ 0.807g/ml
Foreign amino acid	To pass test
Heavy metals (as Pb)	Max 0.001%
Ammonium (NH_4)	Max 0.02%

Product No.	Packing	Price(₩)
5066	25g	16,300

1,2-Propanediol → *go to Propylene Glycol*

1-Propanol



노말-프로필알콜, n-Propyl alcohol, 1-hydroxy propane
● CAS No. 71-23-8 ● EC No. 200-746-9
● $CH_3CH_2CH_2OH$ ● FW 60.10

● Vapour pressure 19hPa (20℃) ● Spec. density 0.80 g/cm³ (20℃) ● Explosive limit 2.1 - 19.2Vol% ● Flash point 15℃ c.c. ● Solub. in H_2O (20℃) miscible in all proportions ● Saturation conc. 46g/m³ (20℃) ● Melting point -127℃ ● Boiling point 96.5 - 98℃ (1013hPa) ● Ignition temp. 360℃ (DIN 51794)

● IMDG UN 1274 PROPANOL, 3, II
● HS Code 2905 12 00 ● RTECS UH8225000 ● 4류 알코올류 400ℓ

1-Propanol EL

Assay	Min 99.5%
Residue after evaporation	Max 10ppm
Water	Max 0.1%
Chloride (Cl)	Max 50ppm
Aluminum (Al)	Max 30ppb
Arsenic (As)	Max 30ppb
Barium (Ba)	Max 30ppb
Boron (B)	Max 30ppb
Cadmium (Cd)	Max 30ppm
Calcium (Ca)	Max 30ppb
Chromium (Cr)	Max 30ppb
Cobalt (Co)	Max 30ppb
Copper (Cu)	Max 30ppb
Gold (Au)	Max 30ppb
Iron (Fe)	Max 50ppb
Lead (Pb)	Max 50ppb
Lithium (Li)	Max 30ppb
Magnesium (Mg)	Max 30ppb
Manganese (Mn)	Max 30ppb
Nickel (Ni)	Max 30ppb
Potassium (K)	Max 50ppb
Silver (Ag)	Max 30ppb
Sodium (Na)	Max 50ppb
Strontium(Sr)	Max 30ppb
Tin(Sn)	Max 30ppb
Zinc (Zn)	Max 30ppb
Particle Count (0.5 micron and above)	Max 30pcs/ml

Product No.	Packing	Price(₩)
624	3.8ℓ	Call

1-Propanol Extra Pure

Appearance	Clorless liquid, unusual odor.
Assay (by GC)	Min 99.5%
Solubility in water	To pass test
Density (20℃)	0.801 ~ 0.807g/ml
Water	Max 0.3%
Residue after evaporation	Max 0.004%
Acidity(as C_2H_5COOH)	Max 0.004%
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
618	500㎖	8,800
620	1ℓ	12,500
621	18ℓ	100,000

1-Propanol GR

Product No.	Packing	Price(₩)
3838	2.5ℓ	25,000

1-Propanol HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry

Maximum UV Absorbance	
210 nm	Max. 1.00
225 nm	Max. 0.50
250 nm	Max. 0.05
300 nm	Max. 0.01
Assay (by GC)	Min. 99.8%
UV cutoff	Max. 210nm
Color (APHA)	Max. 10
Water	Max. 0.05%
Residue after Evaporation	Max. 3ppm
Titratable Acid	Max. 0.0003mEq/g
carbonyl compounds (as C_2H_5CHO)	Max. 0.03%
Ethanol (CH_3CH_2OH)	Max. 0.01%
Methanol (CH_3OH)	Max. 0.01%
Isopropyl Alcohol ($CH_3CHOHCH_3$)	Max. 0.05%
Solubility in Water	To pass test

Product No.	Packing	Price(₩)
623	4ℓ	62,500

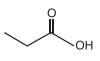
2-Propanol → *go to Iso-Propyl Alcohol*

2-Propen-1-ol → *go to Allyl Alcohol*

2-Propenamide → *go to Acrylamide*

2-Propenoic acid → *go to Acrylic Acid*

Propionic acid CP



프로피온산, Methyl acetic acid
● CAS No. 79-09-4 ● EC No. 201-176-3
● CH_3CH_2COOH ● FW 74.08

● Vapour pressure 5hPa (20℃) ● Spec. density 0.993 g/cm³ (20℃) ● Explosive limit 2.1 - 12 Vol% ● Flash point 50℃ c.c. ● Solub. in H_2O (20℃) freely soluble ● pH value 2.5 (100g/l, H_2O, 20℃) ● Melting point -20℃ ● Boiling point 141℃ ● Ignition temp. 485℃ (DIN 51794)

● IMDG UN 3463 PROPIONIC ACID NOT LESS THAN 90%, 8(3), II
● HS Code 2915 50 00 ● RTECS UE5950000
● 4류 제2석유류(수용성액체) 2000ℓ ● Merck Index 10, 7726

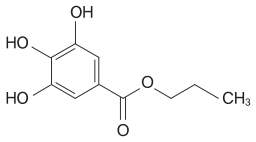
Assay (by GC) ····· Min 98.0%
Density (20℃) ····· 0.993 ~ 0.998g/ml
Water ····· Max 0.1%
Residue after evaporation ····· Max 0.02%

Product No.	Packing	Price(₩)
2376	1ℓ	15,000

n-Propyl alcohol → *go to 1-Propanol*

NEW

Propyl Gallate GR



노말-프로필가레이트, Propyl Gallate 98% (Antioxidant), Gallic acid propyl ester, 3,4,5-Trihydroxybenzoic acid propyl ester
● CAS No. 121-79-9 ● EC No. 204-498-2
● $(OH)_3C_6H_2COOCH_2CH_2CH_3$ ● FW 212.20

● Solub. in H_2O 3.5 g/l (25℃) ● Melting point 145 – 148 ℃ ● Flash point 187 ℃

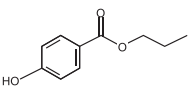
● IMDG NO Dangerous Good ● HS Code 2918 29 00
● Merck Index 10, 7760

Appearance ····· White ~Yellowish brown crystalline powder.
Assay ····· 98.0 ~ 102.0%
Solubility in ethanol ····· To pass test
Melting point ····· 146 ~ 150℃
Loss on drying (at 105℃) ····· Max 1.5%
Ignition residue (as Sulfate) ····· Max 0.1%
Chloride (Cl) ····· Max 0.2ppm
Heavy metals (as Pb) ····· Max 20%

Product No.	Packing	Price(₩)
4677	25g	11,000

Propyl 4-hydroxybenzoate → *go to Propyl Paraben*

Propyl Paraben Extra Pure



프로필파라벤, Propyl 4-hydroxybenzoate
● CAS No. 94-13-3 ● EC No. 202-307-7
● $HOC_6H_4COOCH_2CH_2CH_3$ ● FW 180.20

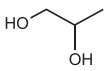
● Vapour pressure 0.67hPa (122℃) ● Spec. density 1.063g/cm³ (102℃) ● Explosive limit 15g/m³ ● Flash point 180℃ ● Solub. in H_2O 0.4g/l (25℃) ● pH value ~6 – 7 (20℃)(saturated solution) ● Melting point 96 –98℃ ● Bulk density ~ 350kg/m³ ● Ignition temp. > 600℃

● IMDG No Dangerous Good
● HS Code 2918 29 30 ● RTECS DH2800000

Appearance ····· Colorless crystal or white crystalline powder.
Melting temp. ····· 96~99℃
Chloride (Cl) ····· Max 0.0035%
Sulfate (SO_4) ····· Max 0.024%
Heavy metals (as Pb) ····· Max 20ppm
p-Hydroxybenzoate and salicylic acid ····· Less than 5.0mg residue & not purple color.
Sulfuric acid color test ····· Less than D standard.
Loss on drying (2g, Silica gel, 3hr) ····· Max 0.5%
Residue after ignition ····· Max 0.1%
Assay (After dry) ····· min 99.0%

Product No.	Packing	Price(₩)
872	25g	5,500
873	500g	22,500

Propylene Glycol Extra Pure



프로필렌글리콜, 1,2-Propanediol
● CAS No. 57-55-6 ● EC No. 200-338-0
● $CH_3CH(OH)CH_2OH$ ● FW 76.09

● Refractive index 1.43 (20℃) ● Vapour pressure 0.11 hPa (20℃) ● Spec. density 1.04g/cm³ (20℃) ● Explosive limit ~ 2.4 – 17.4 Vol% ● Flash point 99℃ c.c. ● Solub. in H_2O (20℃) miscible in all proportions ● pH value 6 – 8 (100g/l, H_2O, 20℃) ● Melting point –59℃ ● Boiling point 188℃ (1013hPa) ● Decomposition point above boiling point ● Ignition temp. 371℃

● IMDG No Dangerous Good ● HS Code 2905 32 00
● RTECS TY2000000 ● 4류 제3석유류(수용성 액체) 4000ℓ
● Merck Index 10, 7756

Appearance ····· Colorless viscous liquid, hygroscopic.
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Density (20℃) ····· 1.034 ~ 1.040g/ml
Water ····· Max 0.3%
Ignition residue (as Sulfate) ····· Max 0.01%
Acidity (as CH_3COOH) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.001%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
609	1kg	12,000
611	18kg	100,000

Propylene Glycol Monomethyl Ether
→ *go to 1-Methoxy-2-Propanol*

Propylene Glycol Monomethyl Ether Acetate
→ *go to 1-Methoxy-2-Propyl Acetate*

PTSA → *go to p-Toluene Sulfonic Acid*

Propylene Glycol momomethyl ether
→ *go to 1-Methoxy-2-Propanol*

Propylene Glycol momomethyl ether Acetate
→ *go to 1-Methoxy-2-Propyl Acetate*

P

P

Pyridine

피리딘
● CAS No. 110-86-1 ● EC No. 203-809-9
● C_5H_5N ● FW 79.10

● Vapour pressure 20hPa (20℃) ● Spec. density 0.982g/cm³ (20℃) ● Explosive limit 1.7 – 10.6 Vol% ● Flash point 17℃ c.c. ● Solub. in H_2O (20℃) soluble ● pH value ~8.5 (16g/l, H_2O, 20℃) ● Saturation conc. 65g/m³ (20℃) ● Melting point −42℃ ● Boiling point ~ 115℃ (1013hPa) ● Ecaporation number 12.7 ● Ignition temp. 482℃

● IMDG UN 1282 PYRIDINE, 3, II ● HS Code 2933 31 00

Pyridine — Extra Pure

Appearance ····· Colorless & clear liquid, unpleasant smell.
Assay (by GC) ····· Min 99.5%
Solubility in water ····· To pass test
Water ····· Max 0.5%
Residue after evaporation ····· Max 0.01%
Chloride (Cl) ····· Max 0.002%
Sulfate (SO_4) ····· Max 0.005%
Ammonium (NH_4) ····· To pass test
Copper (Cu) ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
2393	500㎖	20,000
876	1ℓ	32,500

Pyridine — GR

Product No.	Packing	Price(₩)
3997	2.5ℓ	72,000

Pyridine — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum Absorbance
330 nm ····· Max 1.00
340 nm ····· Max 0.10
350 nm ····· Max 0.01
400 nm ····· Max 0.005
UV Cutoff ····· Max 330nm
Assay (by GC) ····· Min 99.5%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after evaporation ····· Max 5ppm
Ammonia (as NH3) ····· Max 0.002%
Chloride (Cl) ····· Max 0.0005%
Sulfate (SO_4) ····· Max 0.001%
Copper (Cu) ····· Max 5ppm
Solubility in water ····· To pass test
Reducing Substances ····· To pass test

Product No.	Packing	Price(₩)
877	4ℓ	175,000

Pyridine — Ultra Dry

Assay (by GC) ····· Min 99.8%
Color (APHA) ····· Max 10
Water ····· Max 50ppm
Residue after Evaporation ····· Max 5ppm

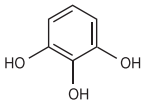
Product No.	Packing	Price(₩)
878	4ℓ	Call

3-Pyridine carboxamide → *go to Nicotinamide*

Pyridine-3-carboxylic acid → *go to Nicotinic acid*

Pyrogallol — GR / AR

NEW



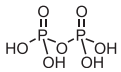
피로갈롤, Pyrogallic acid, 1,2,3-trihydroxybenzene
● CAS No. 87-66-1 ● EC No. 201-762-9
● $C_6H_6O_3$ ● FW 126.11

● Vapor pressure 2 – 4 hPa (140 ℃) ● Spec. density 1.453 g/cm³ (20 ℃) ● Solub. in H_2O 625 g/l (25 ℃) ● pH value 4 – 5 (50 g/l, H_2O, 20 ℃) ● Melting point 131 – 135 ℃ ● Boiling point 309 ℃ (1013 hPa) ● Bulk density ~ 600 kg/m³

● UN 2811 TOXIC SOLID, ORGANIC, N.O.S.(1,2,3-TRIHYDROXYBENZENE), 6.1, III
● HS Code 2907 29 00 ● Merck Index 10, 7901

Product No.	Packing	Price(₩)
5085	25g	12,300
5403	500g	95,000

Pyrophosphoric acid — CP



2인산, DIphosphoric acid
● CAS No. 2466-09-3
● $H_4P_2O_7$ ● FW 177.98

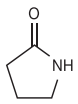
Appearance ····· Colorless hygrscopic liquid.
Lead(Pd) ····· Max 50ppm
Iron (Fe) ····· Max 1ppm
Assay(as P_2O_5) ····· Max 75.0%

Product No.	Packing	Price(₩)
883	500g	18,000

2-Pyrrolidinone → *go to 2-Pyrrolidone*

2-Pyrrolidone — Extra Pure

NEW



2-피롤리돈, 2-Pyrrolidinone
● CAS No. 616-45-5 ● EC No. 210-483-1
● C_4H_7NO ● FW 85.11

● Vapour pressure 0.04 hPa (20℃) ● Spec. density 1.103 g/cm³ (20℃) ● Explosive limits 1.8 – 16.6 Vol% ● Flash point 138 ℃c.c.(DIN 51758) ● Solub.in H_2O (20℃) soluble ● Melting point 24 – 26 ℃ ● Boiling point 250 ℃ ● Ignition temp. 390 ℃ (DIN 51794)

● IMDG NO Dangerous Good ● HS Code 2933 79 00
● Merck Index 10, 7920

Product No.	Packing	Price(₩)
5197	500㎖	22,500

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

Q

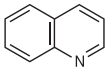
Alphabetical list Numbers

List of Q

Product	Page
Quinoline	237

NEW

Quinoline Extra Pure



퀴놀린, 2,3-Benzopyridine
●CAS No. 91-22-5 ●EC No. 202-051-6
●C_9H_7N ●FW 129.16

●Vapor pressure 0.08 hPa (20 ℃) ●Spec. density 1.095 g/cm³ (20 ℃) ●Solub. in H_2O 6 g/l (20 ℃) ●Melting point -15 ℃ ●pH value 7.3 (5 g/l, H_2O, 20 ℃) ●Explosive limit 1.2 - 7 %(V) ● Flash point 107 ℃ ●Ignition temp. 480 ℃ ● Boiling point 237 - 238 ℃ (1013 hPa)

●IMDG UN 2656 QUINOLINE, 6.1, II ●HS Code 2933 49 90
● RTECS VA9275000 ●제4류 3석유류 ●Merck Index 10, 7991

Product No.	Packing	Price(₩)
5198	500g	30,000

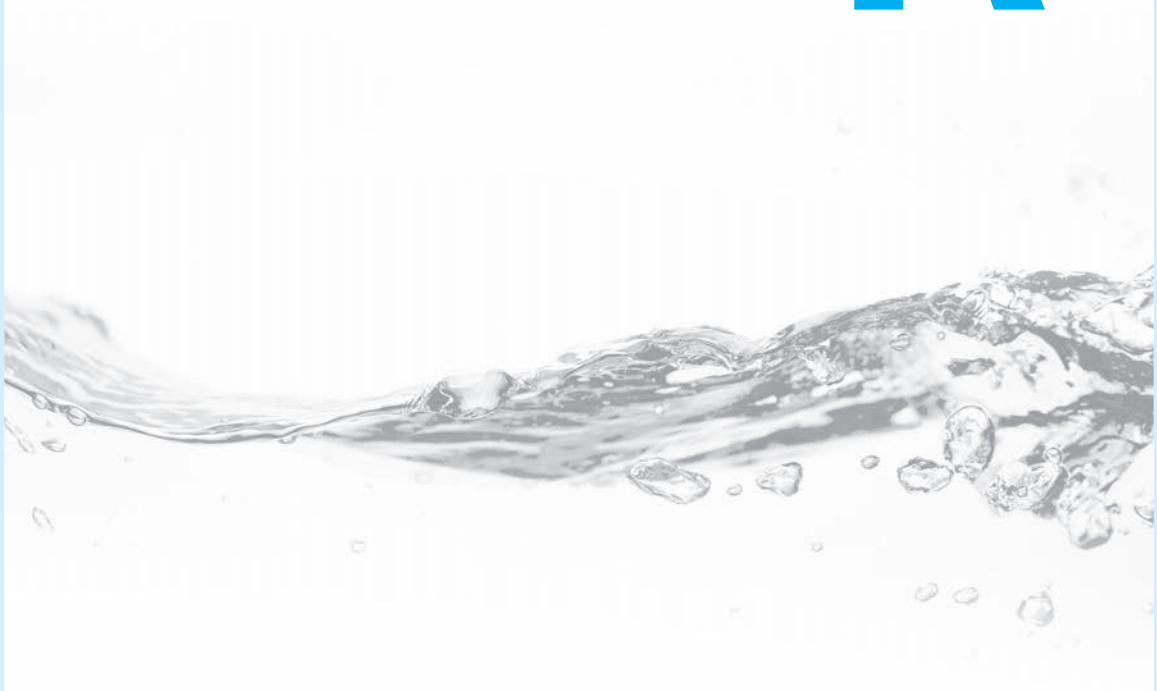
Q

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

R

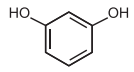


Alphabetical list Numbers

List of R

Product	Page
Resorcinol	241
Rhodamine B	241
Riboflavin	241
D(−)−Ribose	241
Rochelle Salt	241
Rongalite	241
Rosolic Acid Solution	241

Resorcinol GR



레소시놀, 1,3-Dihydroxybenznene
● CAS No. 108-46-3 ● EC No. 203-585-2
● $C_6H_4(OH)_2$ ● FW 110.11

● Vapour pressure 0.1hPa (20℃) ● Spec. density ~ 1.28g/cm³ (20℃) ● Explosive limit 1.4Vol% ● Flash point 127℃ c.c. ● Solub. in H_2O 1000g/l (20℃) ● pH value ~4 – 6 (100g/l, H_2O, 20℃) ● Melting point 109 – 111℃ ● Bulk density ~ 600 – 700kg/m³ ● Boiling point 281℃ (1013hPa) ● Ignition temp. 605℃ (DIN 51794)

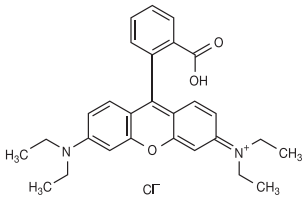
● IMDG 2876 RESORCINOL, 6.1, III ● HS Code 2907 21 00
● RTECS VG9625000 ● Merck Index 10, 8056

Appearance ····· White to pale red colored crystal.
Assay (by GC) ····· Min 99.0%
Solubility in water ····· To pass test
Melting point ····· 110 ~ 112℃
Ignition residue (as Sulfate) ····· Max 0.01%
Acidity(as H_2SO_4) ····· Max 0.02%
Catechol ····· Max 0.1%
Hydroquinone ····· Max 0.2%

Product No.	Packing	Price(₩)
884	25g	5,300
885	500g	26,500

NEW

Rhodamine B Extra Pure



로다민 B, Basic Violet 10
● CAS No. 81-88-9 ● EC No. 201-383-9
● $C_{28}H_{31}ClN_2O_3$ ● FW 479.02

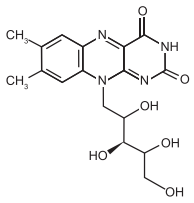
● Spec. density 1.31 g/cm³ (20 ℃) ● Solub. in H_2O 15 g/l (20 ℃) ● Melting point 199 – 201 ℃ ● pH value 3 – 4 (10 g/l, H_2O, 20 ℃) ● Bulk density 250 kg/m³

● IMDG NO Dangerous Good ● HS Code 3204 13 00

Appearance ····· Dark green crystalline powder.
Identification ····· IR Spectormetry
Loss on drying (at 105℃) ····· Max 15.0%

Product No.	Packing	Price(₩)
5063	25g	9,000

Riboflavin Indicator



리보플라빈, Lactoflavine, Vitamine B2
● CAS No. 83-88-5 ● EC No. 201-507-1
● $C_{17}H_{20}N_4O_6$ ● FW 376.36

● Solub. in H_2O 0.065g/l (20℃) ● pH value 5.5 – 7.2 (0.1g/l, H_2O, 20℃) ● Melting point ~ 280℃ (decomposition) ● Bulk density ~ 100kg/m³

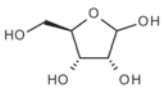
● IMDG No Dangerous Good ● HS Code 2936 23 00

Appearance ····· Yellow to orange colored crstal.
Assay (after dried) ····· Min 98.0%
Specific rotation (α) 20 D ····· –128 ~ –142
Rumiflavine ····· To pass test
Loss on drying(at.105 ℃, 2hr.) ····· Max 1.5%
Ignition residue (as Sulfate) ····· Max 0.2%

Product No.	Packing	Price(₩)
886	25g	10,000

D(-)-Ribose Extra Pure

NEW



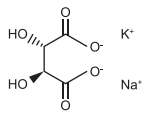
Chiral
● CAS No. 50-69-1 ● EC No. 200-059-4
● $C_5H_{10}O_5$ ● FW 150.13

● Spec. density 0.80 g/cm³ (20℃) ● Solub. in H_2O (20 ℃) soluble ● pH value ~7 (10g/l, H_2O, 20℃) ● Melting point ~90 – 95 ℃ ● Bulk density ~480 kg/m³

● IMDG NO Dangerous Good ● HS Code 2940 00 00

Product No.	Packing	Price(₩)
5199	25g	67,500

Rochelle Salt Extra Pure



롯셀염, Potassium sodium tartrate tetrahydrate
● CAS No. 6381-59-5 ● EC No. 205-698-2
● $KOOCCH(OH)CH(OH)COONa \cdot 4H_2O$ ● FW 282.22

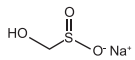
● Solub. in H_2O 630g/l (20℃) ● pH value 7.0 – 8.5 (50g/l, H_2O, 25℃) ● Melting point 70 – 80℃ ● Bulk density ~ 1000kg/m³

● IMDG No Dangerous Good ● HS Code 2918 13 00

Appearance ····· White crystal or powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 6.5 ~ 8.5
Chloride (Cl) ····· Max 0.01%
sulfur compounds (as SO_4) ····· Max 0.03%
Lead (Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.01%

Product No.	Packing	Price(₩)
588	500g	9,000
4207	1kg	19,300

Rongalite CP



롱가리트, Sodium formaldehydesulfoxylate hydrate
● CAS No. 149-44-0 ● EC No. 205-739-4
● $HOCH_2SO_2Na \cdot 2H_2O$ ● FW 154.11

● Spec. density 1.8g/cm³ (20℃) ● Solub. in H_2O 600g/l (20℃) ● pH value 9.5 – 10.5 (100g/l, H_2O, 20℃) ● Melting point ~ 63℃ ● Bulk density ~ 950kg/m³

● IMDG No Dangerous Good ● HS Code 2831 10 00
● RTECS PB380000 ● Merck Index 10, 8454

Product No.	Packing	Price(₩)
887	500g	88,000

Rosolic Acid Solution Indicator Solution

Product No.	Packing	Price(₩)
2401	500㎖	11,400

R

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

S

Alphabetical list Numbers

List of S

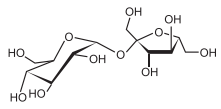
Product	Page
Saccharose	246
Safranine O	246
Salicylic Acid	246
Salicylic acid sodium salt	246
Salicylsulfonic acid	246
Sanicine	246
Sea Sand	246
Selenium Dioxide	246
Selenium(Ⅳ) oxide	246
Sellaite	246
Selenium, powder	247
L-Serine	247
Silicagel Medium Granular (Blue)	247
Silicagel Medium Granular (White)	247
Silica Gel for Chromatography 60 70~230 mesh	247
Silica Gel for Chromatography 60 230~400 mesh	247
Silicon Dioxide	247
Silicone High Vacuum Grease	247
Silver Chloride	248
Silver Diethyldithiocarbamate	248
Silver Nitrate	248
1N – Silver Nitrate (1M)	248
N/10 – Silver Nitrate (0.1M)	248
N/20 – Silver Nitrate (0.05M)	248
N/100 – Silver Nitrate (0.01M)	248
Silver Sulfate	248
Soda caustic	248
Soda Lime	249
Sodium Acetate anhydrous	249
Sodium Acetate trihydrate	249
Sodium Alginate	249
Sodium Arsenite	249
Sodium L-Ascobate	249
Sodium Azide	250
Sodium Benzoate	250
Sodium Bicarbonate	250
Sodium bichromate	250
Sodium Bisulfate monohydrate	250
Sodium Bismuthate	250
Sodium Bisulfite	250
Sodium Borohydride	251
Sodium Bromate	251
Sodium Bromide	251
Sodium Carbonate anhydrous	251
1N-Sodium Carbonate (0.5M)	251
N10-Sodium Carbonate (0.05M)	251
Sodium Chlorate	252
Sodium Chloride	252
1N-Sodium Chloride (1M)	252
N/10-Sodium Chloride (0.1M)	252
N/100-Sodium Chloride (0.01M)	252
Sodium Chlorite	252

Product	Page
Sodium Chromate tetrahydrate	253
Sodium Citrate tribasic dihydrate	253
Sodium Cobaltnitrite	253
Sodium Cyanide	253
Sodium Dichromate dihydrate	253
Sodium N,N-diethyldithiocarbamate trihydrate	253
Sodium dihydrogen phosphate dihydrate	253
Sodium dihydrogenphosphate monohydrate	254
Sodium diphosphate anhydrous	254
Sodium disulfite	254
Sodium dithionite	254
Sodium dodecyl sulfate	254
Sodium Fluoride	254
Sodium formaldesulfoxylate hydrate	254
Sodium Gluconate	254
Sodium hexafluoro silicate	254
Sodium hexahydroxostannate	254
Sodium Hexametaphosphate	254
Sodium Hexanitrocobaltate(Ⅲ)	254
Sodium hydrogen carbonate	254
Sodium hydrogen sulfate monohydrate	254
Sodium hydrogen sulfite	254
Sodium Hydrosulfite	254
Sodium Hydroxide	254
Sodium Hydroxide 10%	255
Sodium Hydroxide 15%	255
Sodium Hydroxide 25%	255
Sodium Hydroxide 30%	255
Sodium Hydroxide 40%	255
Sodium Hydroxide 45%	255
Sodium Hydroxide 50%	256
5N – Sodium Hydroxide (5M)	256
2N – Sodium Hydroxide (2M)	256
1N – Sodium Hydroxide (1M)	256
N/2 – Sodium Hydroxide (0.5M)	256
N/5 – Sodium Hydroxide (0.2M)	256
N/10 – Sodium Hydroxide (0.1M)	256
N/20 – Sodium Hydroxide (0.05M)	256
N/40 – Sodium Hydroxide (0.025M)	256
Sodium Hypochlorite solution	256
Sodium hypophosphite monohydrate	256
Sodium Iodide	256
Sodium Lactate 50% solution	257
Sodium Lauryl Sulfate	257
Sodium Metabisulfite	257
Sodium, metal	257
Sodium Metasilicate nonahydrate	257
Sodium Methoxide 30% sodution in methanol	257
Sodium Molybdate dihydrate	258
Sodium Nitrate	258
Sodium Nitrite	258
Sodium nitroferricyanide dihydrate	258

Product	Page
Sodium Nitroprusside	258
Sodium octadecanoate	258
Sodium Orthosilicate	258
Sodium Oxalate	258
N/10 – Sodium Oxalate (0.05M)	259
N/40 – Sodium Oxalate (0.0125M)	259
Sodium Perborate tetrahydrate	259
Sodium Percarbonate	259
Sodium peroxidisulfate	259
Sodium peroxoborate tetrahydrate	259
Sodium Persulfate	259
Sodium Phosphate dibasic 12–water	259
Sodium Phosphate dibasic anhydrous	260
Sodium Phosphate dibasic dihydrate	260
Sodium Phosphate monobasic anhydrous	260
Sodium Phosphate monobasic dihydrate	260
Sodium Phosphate monobasic monohydrate	260
Sodium Phosphate tribasic 12–water	260
Sodium Phosphinate monohydrate	260
Sodium Pyrophosphate anhydrous	261
Sodium Pyrophosphate decahydrate	261
Sodium Pyruvate	261
Sodium Salicylate	261
Sodium Selenite	261
Sodium Silicate powder	261
Sodium Silicate Solution	262
Sodium Silicofluoride	262
Sodium Stannate trihydrate	262
Sodium Stearate	262
Sodium Succinate hexahydrate	262
Sodium Sulfate anhydrous	262
Sodium Sulfate decahydrate	263
Sodium sulfide hydrate	263
Sodium Sulfite anhydrous	263
di–Sodium tartrate dihydrate	263
Sodium Tartrate dihydrate	263
Sodium tetraborate	263
Sodium tetrahydroborate	263
Sodium Thiocyanate	263
N/10 – Sodium Thiocyanate (0.1M)	263
Sodium Thioglycollate 80%	264
Sodium Thiosulfate anhydrous	264
Sodium Thiosulfate pentahydrate	264
N/10 – Sodium Thiosulfate (0.1M)	264
N/20 – Sodium Thiosulfate (0.05M)	264
N/2 – Sodium Thiosulfate (0.5M)	264
N/40 – Sodium Thiosulfate (0.025M)	264
Sodium Tripolyphosphate	264
Sodium Tungstate dihydrate	265
Sodium L–ascorbate	265
Sorbic acid potassium salt	265
Sorbitan monolaurate	265

Product	Page
Sorbitan monooleate	265
Sorbitan monopalmitate	265
Sorbitan monostearate	265
D–Sorbitol	265
L(–) Sorbose	265
Sonic Clean	265
Span 20	265
Span 40	265
Span 60	266
Span 80	266
Stannic Chloride Anhydrous	266
Stannic Oxide	266
Stannous Chloride dihydrate	266
Stannous pyrophosphate	266
Stannous Sulfate	266
Starch Corn	266
Starch Potato	267
Starch Soluble	267
Stearic acid	267
Stearyl Alcohol	267
Strontium Carbonate	267
Strontium Chloride hexahydrate	267
Strontium Hydroxide Octahydrate	267
Strontium Nitrate	268
Strontium Sulfate	268
Styrene Monomer	268
Succinic Acid	268
Sucrose	268
Sudan–III	268
Sudan–III Solution	268
Sulfamic Acid	269
Sulfanilamide 98%	269
Sulfanilic Acid	269
Sulfomethane	269
5–Sulfosalicylic Acid dihydrate	269
Sulfur powder	269
Sulfuric Acid 95%	270
Sulfuric Acid 15%	270
5N–Sulfuric Acid	270
2N–Sulfuric Acid (1M)	270
1N–Sulfuric Acid (0.5M)	270
N/2–Sulfuric Acid (0.25M)	271
N/5–Sulfuric Acid (0.1M)	271
N/10–Sulfuric Acid (0.05M)	271
N/20–Sulfuric Acid(0.025M)	271
N/40–Sulfuric Acid(0.0125M)	271
N/50–Sulfuric Acid(0.01M)	271
N/100–Sulfuric Acid(0.005M)	271
Sulfuric Acid diluted pH4	271

Saccharose — Extra Pure



사카로스, Sucrose, Cane sugar
● CAS No. 57-50-1 ● EC No. 200-334-9
● $C_{12}H_{22}O_{11}$ ● FW 342.29

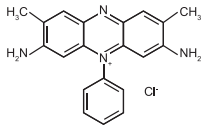
● Solub. in H_2O (20℃) freely soluble ● pH value ~7 (100g/l, H_2O, 20℃) ● Melting point 169 -170℃ ● Bulk density ~ 800 - 905 kg/m³

● IMDG No Dangerous Good ● HS Code 1701 99 10 ● RTECS WN6500000

Appearance	White crystal or fine powder.
Specific rotation (α) 20 D	+66.0 ~ +67.0
Solubility in water	To pass test
Ignition residue (as Sulfate)	Max 0.05%
Invert sugar	Max 0.3%
Chloride (Cl)	Max 0.005%
Sulfate (SO_4)	Max 0.005%
Calcium(Ca)	Max 0.01%
Heavy Metals (as Pb)	Max 5ppm
Iron (Fe)	Max 0.001%

Product No.	Packing	Price(₩)
848	500g	4,400

Safranine O — Indicator



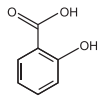
사프라닌O,
● CAS No. 477-73-6 ● EC No. 207-518-8
● $C_{20}H_{19}ClN_4$ ● FW 350.84

● Solub. in H_2O 50 g/l (20℃) ● pH value ~ 10 (10 g/l, H_2O, 20℃) ● Bulk density ~ 400kg/cm³

● IMDG No Dangerous Good ● HS Code 3204 13 00 ● RTECS SG1623000

Product No.	Packing	Price(₩)
888	25g	15,500

Salicylic Acid — Extra Pure



살리실산, 2-Hydroxy benzoic acid
● CAS No. 69-72-7 ● EC No. 200-712-3
● $C_6H_4(OH)COOH$ ● FW 138.12

● Spec. density 1.443 g/cm³(20℃) ● Flash point 157℃ c.c. ● Solub. in H_2O 2 g/l (20℃) ● pH value 2.4 (H_2O) (saturated solution) ● Melting point 157 - 159℃ ● Bulk density 400 - 500kg/cm³ ● Boiling point 211℃ ● Ignition temp. 500℃

● IMDG No Dangerous Good ● HS Code 2918 21 00 ● Merck Index 10, 8190

Appearance	White acicular crystal or crystalline powder.
Assay	Min 99.5%
Solubility in ethanol	To pass test
Melting point	158 ~ 161℃
Ignition residue (as Sulfate)	Max 0.05%
Chloride (Cl)	Max 0.005%
Heavy metals (as Pb)	Max 0.001%
Iron (Fe)	Max 0.001%
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
890	500g	8,000
2405	1kg	13,800
3493	25kg	231,000

Salicylic acid sodium salt → *go to Sodium salicylate*

Salicylsulfonic acid → *go to 5-Sulfosalicylic Acid dihydrate*

Sanicine — 식약청별규

● 무독성, 광범위 살균소독제

성상	이 약은 황색을 띤 점조성 액으로 특이한 냄새가 있다.
pH(25℃)	6.0 ~ 9.0
중금속	Max 5ppm
미반응 아민	이소니트릴과 같은 냄새가 나지 않는다.
살균력시험	이상없음
함량	9.0 ~ 11.0%

Product No.	Packing	Price(₩)
1395	10kg	62,500

Sea Sand — CP

해사
● CAS No. 7631-86-9 ● EC No. 231-545-4

● Spec. density 2.66 g/cm³(20℃) ● Solub. in H_2O (20℃) insoluble ● pH value 5 - 8 (150 g/l, H_2O, 20℃)(slurry) ● Bulk density ~ 1430 kg/cm³

● IMDG No Dangerous Good ● HS Code 2505 10 00 ● Merck Index 10, 8329

Appearance	Mixture of white, brown and black particles.
Hydrochloric acid insoluble matter	Max 0.3%
Ignition loss (after dried at.110℃)	Max 0.4%
Chloride (Cl)	Max 0.01%

Product No.	Packing	Price(₩)
2413	500g	12,500

Selenium Dioxide

이산화셀레늄, Selenious anhydride, Selenium(IV) oxide
● CAS No. 7446-08-4 ● EC No. 231-194-7
● SeO_2 ● FW 110.96

● Vapour pressure 16hPa (70℃) ● Solub. in H_2O 384 g/l (14℃) ● pH value 2 (10g/l, H_2O, 20℃) ● Bulk density 1500kg/m³

● IMDG UN 3283 SELENIUM COMPOUND, SOLID, N.O.S., 6.1, II
● HS Code 2811 29 90

Selenium Dioxide — Extra Pure

Appearance	Colorless to pale red crystal or crystalline powder.
Assay	Min 95.0%
Nitrate (NO_3)	To pass test
Selenium and sulfite	To pass test
Ignition residue (as Sulfate)	Max 0.2%

Product No.	Packing	Price(₩)
2416	500g	165,000

Selenium Dioxide — CP

Product No.	Packing	Price(₩)
2416	500g	165,000

Selenium(Ⅳ) oxide → *go to Selenium Dioxide*

Sellaite → *go to Magnesium Fluoride*

Selenium, powder GR

셀레늄 분말

● CAS No. 7782-49-2 ● EC No. 231-917-4
● Se ● FW 78.96

● Spec. density 0.001hPa (20℃) ● Solub. in H_2O 4.28 g/cm³ (20℃) ● pH value slightly soluble ● Melting point 217℃ ● Bulk density 1270 kg/m³

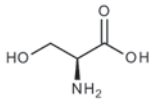
● UN3077 ENVIRONMETALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III
● HS Code 2804 09 00

Appearance ····· Dark red-black, powder.
Assay ····· Min 99.0%
Ignition residue (as sulfates) ····· Max 0.05%
Nitrogen compounds (as N) ····· Max 0.003%
Sulfur compounds (as S) ····· Max 0.02%
Copper (Cu) ····· Max 0.005%
Lead (Pb) ····· Max 0.005%
Tellurium (Te) ····· To pass test
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
3901	500g	210,000

NEW

L-Serine Extra Pure



Chiral

L-세린, (S)-2-Amino-3-hydroxypropionic acid
● CAS No. 56-45-1 ● EC No. 200-274-3
● $C_6H_7NO_3$ ● FW 105.09

● Solub. in H_2O 270 g/l (20℃) ● pH value 5 – 6 (50 g/l, H_2O, 20 ℃) ● Melting point 215 – 225 ℃ ● Bulk density ~ 660 kg/m³

● IMDG NO Dangerous Good ● HS Code 2922 50 00
● RTECS VT8100000

Product No.	Packing	Price(₩)
5200	25g	18,500

Silicagel Medium Granular (Blue) CP

실리카젤, 청색

● CAS No. 7631-86-9 ● EC No. 231-545-4 ● SiO_2 ● FW 60.08

● Solub. in H_2O (20℃) insoluble ● Bulk density ~ 750 – 800 kg/cm³

● IMDG No Dangerous Good ● HS Code 2811 22 00

Appearance ····· Blue colored, bead-type crystal.
Absorption capacity RH=20% ····· Min 8.0%
Absorption capacity RH=50% ····· Min 20.0%
Absorption capacity RH=90% ····· Min 30.0%
Qualified Size ratio(2~4mm) ····· Min 90%
pH ····· 4.0 ~ 8.0

Product No.	Packing	Price(₩)
896	500g	6,900

Silicagel Medium Granular (White) CP

Appearance ····· White colored, bead-type crystal.
Absorption capacity RH=20% ····· Min 8.0%
Absorption capacity RH=50% ····· Min 20.0%
Absorption capacity RH=90% ····· Min 30.0%
Qualified Size ratio(2~4mm) ····· Min 90%
pH ····· 4.0 ~ 8.0

Product No.	Packing	Price(₩)
897	500g	5,000

Silicagel 60 70~230 mesh Extra Pure

Particle size ····· 63 ~ 200 ㎛
Specific Surface Area ····· 470 ~ 570 m²/g
Specific Pore Volume ····· 0.70 ~ 0.90 ㎖/g
Mean Pore Size (nm) ····· 6 nm
pH (10% aq. Solution) ····· 6.5 ~ 7.5
Loss on drying ····· Max 3.0 ~ 6.0%

Product No.	Packing	Price(₩)
3912	1kg	75,000
3911	25kg	Call

Silicagel 60 230~400 mesh Extra Pure

Particle size ····· 40 ~ 63 ㎛
Specific Surface Area ····· 470 ~ 570 m²/g
Specific Pore Volume ····· 0.70 ~ 0.90 ㎖/g
Mean Pore Size ····· 6 nm
pH (10% aq. Solution) ····· 6.5 ~ 7.5
Loss on drying ····· 3.0 ~ 6.0%

Product No.	Packing	Price(₩)
3910	1kg	52,500
3909	25kg	Call

Silicon Dioxide Extra Pure

이산화규소, Silicic Anhydride
● CAS No. 7631-86-9 ● EC No. 262-373-8
● SiO_2 ● FW 60.08

● Spec. density 2.32 g/cm³(20℃) ● Solub. in H_2O (20℃) insoluble ● pH value 3.7 – 4.7 (40 g/l, H_2O, 20℃)(suspension) ● Melting point 1710℃ ● Boiling point 2230℃

● IMDG No Dangerous Good ● HS Code 3207 40 30 ● RTECS VV7328000

Appearance ····· White powder or granular.
Hydrochloric acid soluble matter ····· Max 1.0%
Non-volatile matter hydrofluoric acid(as sulfate) ····· Max 2.0
Ignition loss (950℃) ····· Max 10.0%
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.05%
Lead (Pb) ····· Max 0.01%
Iron (Fe) ····· Max 0.01%

Product No.	Packing	Price(₩)
3533	300g	5,000
2419	15kg	131,300

Silicone High Vacuum Grease Extra Pure

NEW

실리콘 진공 그리즈, Polydimethylsiloxane
● CAS No. 63148-62-9

● Spec. density 0.96 g/cm³

● HS Code 3910 00 00

Product No.	Packing	Price(₩)
5201	1kg	52,500

S

Silver Chloride — Extra Pure

염화은

● CAS No. 7783-90-6 ● EC No. 232-003-3
● AgCl ● FW 143.32

● Spec. density 5.56g/cm³(20℃) ● Solub. in H_2O 0.00188 g/l (25℃) ● Melting point 455℃ ● Boiling point 1554℃

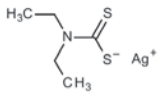
● IMDG No Dangerous Good ● HS Code 2843-29-00

Appearance ····· Powder of white amorphousness or Rough lump.
Assay(After dried at.120) ····· Min 99.0%
Appearance ····· Lemon yellow permission.
Solubility in NH_4OH ····· To pass test
Loss on drying (at.120℃) ····· Max 0.3%
Nitrate (NO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.01%

Product No.	Packing	Price(₩)
899	25g	Call
2422	500g	Call

NEW

Silver Diethyldithiocarbamate — GR /AR



디에틸디티오카르밤산은
Diethyldithiocarbamic acid silver salt
● CAS No. 1470-61-7 ● EC No. 216-003-7
● $C_5H_{10}NS_2Ag$ ● FW 256.14

● Solub. in H_2O (20 ℃) insoluble ● Melting point 178 – 183 ℃ ● pH value 5.0 – 6.5 (H_2O) suspension ● Bulk density ~ 340 kg/m³

● IMDG NO Dangerous Good ● HS Code 2843 29 00

Appearance ····· Greenish yellow powder.
Assay ····· Min 98.0%
Melting point ····· About 175℃
Solubility in pyridine ····· To pass test
pH (Aqueous solution) ····· 5.0 ~ 6.5
Suitability for arsenic determination ····· To pass test

Product No.	Packing	Price(₩)
4943	25g	168,800

Silver Nitrate — Extra Pure

질산은
● CAS No. 7761-88-8 ● EC No. 231-853-9
● $AgNO_3$ ● FW 169.87

● Spec. density 4.35g/cm³(20℃) ● Solub. in H_2O 2160 g/l (20℃) ● pH value 5.4 – 6.4 (100g/l, H_2O, 20℃) ● Melting point 212℃ ● Bulk density ~ 2350 kg/m³ ● Boiling point 444℃ (decomposion)

● IMDG UN 1493 SILVER NITRATE, 5.1, II ● HS Code 2843 21 00
● 이류정산염류 300kg ● Merck Index 10, 8352

Appearance ····· Glossy crystal or white crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Acidity ····· To pass test
Chloride (Cl) ····· Max 0.001%
Sulfate (SO_4) ····· Max 0.005%
Substances not precipitated by HCl ····· Max 0.02%
Copper (Cu) ····· Max 0.002%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
900	25g	Call
901	500g	Call

1N - Silver Nitrate (1M) — Normal

1N(1M)질산은

Product No.	Packing	Price(₩)
902	500㎖	67,500

N/10 - Silver Nitrate (0.1M) — Normal

N/10(0.1M)질산은

Appearance ····· To pass test
Factor(at. 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
903	500㎖	21,000
3505	1 ℓ	35,000

N/20 - Silver Nitrate (0.05M) — Normal

N/20(0.05M)질산은

Appearance ····· To pass test
Factor(at. 20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
904	500㎖	15,000

N/100 - Silver Nitrate (0.01M) — Normal

N/100(0.01M)질산은

Product No.	Packing	Price(₩)
905	500㎖	11,300

Silver Sulfate — Extra Pure

황산은
● CAS No. 10294-26-5 ● EC No. 233-653-7
● Ag_2SO_4 ● FW 311.79

● Spec. density 5.45 g/cm³(20℃) ● Solub. in H_2O 8g/l (25℃) ● pH value 5 – 6 (5g/l, H_2O, 25℃) ● Melting point 655℃ ● Bulk density ~ 1200kg/m³

● IMDG No Dangerous Good ● HS Code 2843 29 00
● Merck Index 10, 8368

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.001%
Sulfate (SO_4) ····· Max 0.005%
Substances not precipitated by HCl ····· Max 0.1%
Total Nitrogen (as N) ····· Max 0.01%

Product No.	Packing	Price(₩)
906	25g	Call
907	500g	Call

Soda caustic → *go to Sodium Hydroxide*

Soda Lime GR

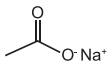
NEW

소다라임
● CAS No. 8006-28-8

Appearance ····· Pink crystals.
Absorption capacity of CO_2 ····· Min 28%
Loss on drying (at 105℃) ····· 13 ~ 18%
Colour changes ····· Pink to white

Product No.	Packing	Price(₩)
4784	500g	14,400

Sodium Acetate anhydrous Extra Pure



아세트산나트륨, 무수, Acetic acid sodium salt
● CAS No. 127-09-3 ● EC No. 204-823-8
● CH_3COONa ● FW 82.03

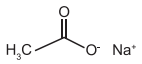
● Spec. density 1.52 g/cm³(20℃) ● Flash point > 250 ℃ c.c. ● Solub. in H_2O 365 g/l (20℃) ● pH value 7.5 – 9.22 (30g/l, H_2O, 20℃) ● Melting point 324℃ (decomposition) ● Bulk density 320 – 470kg/m³ ● Boiling point > 400℃ (decomposition) ● Ignition temp. 607℃

● IMDG No Dangerous Good ● HS Code 2915 29 00
● RTECS AJ4300010 ● Merck Index 10, 8399

Appearance ····· White crstal or crystalline powder, hygroscopic.
Assay ····· Min 98.5%
Solubility in water ····· To pass Test
pH (5 w/v %, 25℃) ····· 7.5 ~ 9.0
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.02%
Lead (Pb) ····· Max 0.0015%
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
909	500g	5,500

Sodium Acetate trihydrate



아세트산나트륨, 3수
● CAS No. 6131-90-4 ● EC No. 204-823-8
● $CH_3COONa \cdot 3H_2O$ ● FW 136.08

● Spec. density 1.42 g/cm³(20℃) ● Solub. in H_2O 613 g/l (20℃) ● pH value 7.5 – 9.2 (50g/l, H_2O, 20℃) ● Melting point 58℃ ● Bulk density ~ 900kg/m³ ● Boiling point > 400℃ (anhydrous substance) (decomposition) ● Decomposition point (release of crystalline water) ● Ignition temp. 607℃

● IMDG No Dangerous Good ● HS Code 2915 29 00
● RTECS AJ4580000 ● Merck Index 10, 8399

Sodium Acetate trihydrate Extra Pure

Appearance ····· White crstal or crystalline powder, efflorescence.
Assay ····· Min 98.5%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 7.5 ~ 9.0
Chloride (Cl) ····· Max 200ppm
Sulfate (SO_4) ····· Max 0.01%
Lead (Pb) ····· Max 20ppm
Iron (Fe) ····· Max 20ppm
Substances reducing permanganate ····· To pass test

Product No.	Packing	Price(₩)
914	500g	5,000
915	1kg	8,500

Sodium Acetate trihydrate KP

성상 ····· 무색의 결정 또는 흰색의 결정성 가루로 냄새는 없든가 아세트산 냄새가 조금 있다. 물, 아세트산무수물, 에탄올에 녹고, 에테르에는 거의 녹지 않는다.
확인시험 ···· 이 약의 수용액(1→10)은 아세트산염 및 나트륨염의 정성반응을 나타낸다.
순도시험
용해상태 ····· 액은 무색이며 맑다.
산 또는 알칼리 ····· 페놀프탈레인시액에 적색, 0.01mol/L HCl 1mL를 적가시 무색이어야 한다.
염화물 ····· 0.011% 이하
황산염 ····· 0.017% 이하
중금속 ····· 10 ppm 이하
칼슘 및 마그네슘 ····· 0.01mol/L EDTA 용액에 적정시 청색이 회청색으로 변할 때 0.5mL 이하.
비소 (As) ····· Max 2ppm
과망간산칼륨환원성물질 ····· 0.002mol/L KMnO4 0.5mL에 5분간 끓일 때 적색 유지.
건조감량(1g, 80℃에서 2시간, 130℃에서 2시간) ····· 39.0 ~ 40.5%
정량법(함량) ····· 99.5% 이상

Product No.	Packing	Price(₩)
1732	1kg	6,300
917	25kg	62,500

Sodium Alginate Extra Pure

알긴산나트륨
● CAS No. 9005-38-3 ● $(C_6H_7NaO_6)n$

Appearance ····· White to pale yellow fibriform, grain, granular or powder.
Assay(after drying) ····· Min 90.0%
Loss on drying (105℃,4hr) ····· Max 15.0%
Sulfate ····· Max 1.0%
Heavy Metals ····· Max 20ppm
Arsenic ····· Max 4ppm

Product No.	Packing	Price(₩)
918	500g	27,000

Sodium Arsenite Extra Pure / AR

NEW

아르세나이트나트륨
● CAS No. 7784-46-5
● $NaAsO_2$ ● FW 129.91

● IMDG UN 2027 SODIUM ARSENITE, SOLID, 6.1, II ● HS Code 2842 90 80

Product No.	Packing	Price(₩)
5202	25g	45,000

Sodium L-Ascorbate Extra Pure

아스코빈산나트륨, L-Ascorbic acid, Sodium salt
● CAS No. 134-03-2 ● $C_6H_7NaO_6$ ● FW 198.11

● Spec. density 1.8 g/cm³(20℃) ● Melting point 218℃ ● Boiling point 220℃
● $[\alpha]_D^{20}$ +104° (c=1, H_2O, 25℃)

Appearance ····· White or yellowish crystals or crystalline powder.
Assay (after dried) ····· Min 99.0%
Solubility in water ····· To pass test
Refractive Index (n 25 D) ····· 103.0 ~ 108.0
pH(2%) ····· 6.5 ~ 8.0
Arsenic (As) ····· Max 0.0004%
Heavy metals (as Pb) ····· Max 0.002%
Loss on drying ····· Max 0.5%

Product No.	Packing	Price(₩)
920	500g	27,000

S

S

Sodium Azide — Extra Pure

아지화나트륨

● CAS No. 26628-22-8 ● EC No. 247-852-1 ● NaN_3 ● FW 65.01

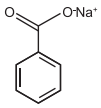
● Spec. density 1.85 g/cm³(20℃) ● Solub. in H_2O 420g/l (17℃) ● Melting point 275℃ (decomposition) ● Boiling point 300℃ (rigorous decomposition)

● IMDG UN 1687 SODIUM AZIDE, 6.1, II ● HS Code 2850 00 50
● Merck Index 10, 8412

Appearance ····· White to pale white crystal.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
Chromium ····· To pass test

Product No.	Packing	Price(₩)
923	25g	4,900
924	500g	37,500

Sodium Benzoate — Extra Pure



벤조산나트륨(안식향산나트륨)

● CAS No. 532-32-1 ● EC No. 208-534-8
● $C_6H_5CO_2Na$ ● FW 144.11

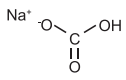
● Spec. density 1.44 g/cm³ ● Solub. in H_2O 660 g/l (20℃) ● pH value ~ 9 (100g/l, H_2O, 20℃) ● Melting point 410 – 430℃ ● Bulk density ~ 350kg/m³ ● Ignition temp. > 500℃

● IMDG No Dangerous Good ● HS Code 2916 31 00 ● RTECS DH6650000

Appearance ····· White grain, crystal or crystalline powder.
Assay (after dried) ····· Min 99.0%
Solubility in water ····· To pass test
Loss on drying (at.110℃, 4hr.) ····· Max 1.5%
Alkalies (as NaOH) ····· To pass test%
Chlorin compounds (as Cl) ····· Max 0.05%
Sulfate (SO_4) ····· Max 0.05%
Heavy metals (as Pb) ····· Max 0.003%
Arsenic (As) ····· Max 3ppm

Product No.	Packing	Price(₩)
925	500g	7,500
2435	20kg	127,500

Sodium Bicarbonate — Extra Pure



중탄산나트륨(중조), Sodium hydrogen carbonate

● CAS No. 144-55-8 ● EC No. 205-633-8
● $NaHCO_3$ ● FW 84.01

● Vapour pressure 972hPa (100℃) ● Spec. density 2.22 g/cm³ (20℃) ● Solub. in H_2O 96 g/l (20℃) ● pH value ~ 8.6 (50g/l, H_2O, 20℃) ● Melting point 270℃ (decomposition) ● Bulk density ~ 1050kg/m³

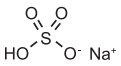
● IMDG No Dangerous Good ● HS Code 2836 30 00
● RTECS VZ0950000 ● Merck Index 10, 8414

Appearance ····· White crystal or crystalline powder.
Assay (after dried) ····· Min 99.5%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.01%
Magnesium (Mg) ····· Max 200ppm
Calcium(Ca) ····· Max 0.02%
Lead (Pb) ····· Max 30ppm
Iron (Fe) ····· Max 30ppm

Product No.	Packing	Price(₩)
929	500g	4,400
2736	1kg	7,000
930	25kg	46,900

Sodium bichromate → *go to Sodium Dichromate dihydrate*

Sodium Bisulfate monohydrate — Extra Pure



중황산나트륨, Sodium hydrogen sulfate monohydrate

● CAS No. 10034-88-5 ● EC No. 231-665-7
● $NaHSO_4 \cdot H_2O$ ● FW 138.08

● Spec. density 2.12 g/cm³ (20℃) ● Solub. in H_2O 1080 g/l (20℃) ● pH value ~ 1 (50g/l, H_2O, 20℃) ● Melting point 183℃ (decomposition) ● Bulk density 900 – 970kg/m³

● IMDG UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (SODIUM HYDROGEN SULPHATE), 8, III
● HS Code 2833 19 00 ● Merck Index 10, 8417

Appearance ····· White crystalline powder.
Assay (as H_2SO_4) ····· 34.0 ~ 37.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.005%
Nitrate (NO_3) ····· To pass test
Heavy metals (as Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.003%

Product No.	Packing	Price(₩)
935	500g	7,800
936	25kg	131,300

Sodium Bismuthate — Extra Pure /AR

NEW

삼산화나트륨비스무스

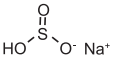
● CAS No. 12232-99-4 ● EC No. 235-455-6
● $BiNaO_3$ ● FW 279.97

● Solub. in H_2O (20 ℃) insoluble ● pH value 10 (50 g/l, H_2O, 20 ℃) (slurry) ● Bulk density ~ 860 kg/m³

● IMDG NO Dangerous Good ● HS Code 2841 90 85

Product No.	Packing	Price(₩)
5203	25g	15,000
5204	500g	142,500

Sodium Bisulfite — Extra Pure



아황산수소나트륨, Sodium hydrogen sulfite

● CAS No. 7631-90-5 ● $NaHSO_3$ ● FW 104.06

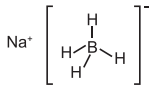
● Vapour pressure 40hPa (20℃) ● Spec. density ~ 1.34g/cm³ (20℃) ● Solub. in H_2O (20℃) soluble ● pH value 4.5 (20℃) ● Melting point −44℃ ● Boiling point 146℃

● IMDG UN 2693 BISULPHITES, AQUEOUS SOUTION, N.O.S. (SODIUM BISULPHITE SOLUTION), 8, III ● HS Code 2832 10 00 ● Merck Index 10, 8476

Appearance ····· White crystalline powder.
Assay(as SO_2) ····· Min 58.5%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.005%
Arsenic (As) ····· Max 5ppm
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
938	500g	5,600
939	1kg	9,400
940	25kg	62,500

Sodium Borohydride



수소화붕소나트륨, Sodium tetrahydroborate
● CAS No. 16940-66-2 ● EC No. 241-004-4
● $NaBH_4$ ● FW 37.82

● Spec. density 1.07 g/cm³ (20℃) ● Explosive limit 3.02 Vol% ● Flash point 69℃ ● Solub. in H_2O 550 g/l (25℃) (slow decomposition) ● pH value ~ 11 (10g/l, H_2O, 20℃) ● Melting point ~ 400℃ (slow decomposition) ● Bulk density ~ 350 – 500kg/m³ ● Boiling point ~ 500℃ (decomposition) ● Ignition temp. ~ 220℃

● IMDG UN 1426 NATRIUMBORHYRID, 4.3, I ● HS Code 2850 00 20
● RTECS ED3325000 ● 3류 금속의 수소화물 300kg ● Merck Index 10, 8423

Sodium Borohydride — Extra Pure

Product No.	Packing	Price(₩)
2440	25g	11,300

Sodium Borohydride — CP

Product No.	Packing	Price(₩)
330	500g	97,500

Sodium Bromate — Extra Pure

브로민산나트륨
● CAS No. 7789-38-0 ● EC No. 232-160-4 ● $NaBrO_3$ ● FW 150.90

● Spec. density 3.3g/cm³ (20℃) ● Solub. in H_2O 364g/l (20℃) ● pH value (20℃) neutral (aqueous solution) ● Melting point 381℃ (decomposition)

● IMDG UN 1494 SODIUM BROMATE, 5.1, II ● HS Code 2829 90 40
● Merck Index 10, 8424

Appearance ····· Colorless to white crystal or crystalline powder.
Assay ····· Max. 99.0%
Solubility in water ····· To pass test
pH (5%, 25℃) ····· 5.0 ~ 8.0
Sulfate (SO_4) ····· Max 0.02%
Heavy metals (as Pb) ····· Max 0.001%
Iron(Fe) ····· Max 0.002%
Bromate ····· To pass test

Product No.	Packing	Price(₩)
946	500g	11,300

Sodium Bromide — Extra Pure

브로민화나트륨, Bromo sodium
● CAS No. 7647-15-6 ● EC No. 231-599-9 ● NaBr ● FW 102.90

● Vapour pressure 1.3hPa (806℃) ● Spec. density 3.20g/cm³ (20℃) ● Solub. in H_2O 905g/l (20℃) ● pH value ~5.4 (50g/l, H_2O, 20℃) ● Melting point 755℃ ● Bulk density ~ 1750kg/m³ ● Boiling point 1393℃

● IMDG No Dangerous Good ● HS Code 2827 51 00
● RTECS VZ3150000 ● Merck Index 10, 8425

Appearance ····· White crystal or crystalline powder, hygroscopic.
Assay (after dried) ····· Min 99.5%
Solubility in water ····· To pass test
Loss on drying (at.105℃,4hr.) ····· Max 1.0%
Bromate ····· To pass test
Chloride (Cl) ····· Max 0.2%
Iodine ····· To pass test
Sulfate (SO_4) ····· Max 0.01%
Heavy Metals (as Pb) ····· Max 5ppm
Barium (Ba) ····· Max 0.002%

Product No.	Packing	Price(₩)
947	500g	10,600

Sodium Carbonate anhydrous — Extra Pure

탄산나트륨, 무수
● CAS No. 497-19-8 ● EC No. 207-838-8
● Na_2CO_3 ● FW 105.99

● Spec. density 2.53g/cm³ (20℃) ● Solub. in H_2O 220 g/l (20℃) ● pH value 11.5 (50g/l, H_2O, 25℃) ● Melting point 854℃ ● Bulk density ~ 1100kg/m³ ● Boiling point 1600℃ (decomposition)

● IMDG No Dangerous Good ● HS Code 2836 20 00
● RTECS VZ4050000 ● Merck Index 10, 8427

Appearance ····· White powder, hygroscopic.
Assay (after ignition) ····· Min 99.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.15%
Sulfate (SO_4) ····· Max 0.01%
Potassium(K) ····· Max 0.06%
Lead (Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.004%

Product No.	Packing	Price(₩)
949	500g	7,000
950	1kg	9,500
951	25kg	137,500

1N-Sodium Carbonate (0.5M) — Extra Pure

1N(0.5M) 탄산나트륨

Product No.	Packing	Price(₩)
954	500㎖	8,000

N/10-Sodium Carbonate (0.05M) — Extra Pure

N/10(0.5M) 탄산나트륨

Product No.	Packing	Price(₩)
2443	500㎖	7,000

S

Sodium Chlorate — Extra Pure

염소산나트륨

● CAS No. 7775-09-9 ● EC No. 231-887-4
● $NaClO_3$ ● FW 106.44

● Spec. density 2.49g/cm³(15℃) ● Solub. in H_2O 1000 g/l (20℃) ● pH value ~5 – 7 (50g/l, H_2O, 20℃) ● Melting point 225℃ (decomposition) ● Bulk density ~ 1500kg/m³ ● Boiling point 300℃ (decomposition)

● IMDG UN 1495 SODIUM CHLORATE, 5.1, II ● HS Code 2829 11 00
● 이류염소산류 50kg

Solubility in water ····· To pass test
Chlorice (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.006%
Bromate(BrO_3) ····· Max 0.05%
Heavy metals(as Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.002%
Calcium(Ca) ····· Max 0.006%
Assay ····· Min 98.0%

Product No.	Packing	Price(₩)
1412	500g	6,900

Sodium Chloride

염화나트륨(순염)

● CAS No. 7647-14-5 ● EC No. 231-598-3 ● NaCl ● FW 58.43

● Vapour pressure 1.3hPa (865℃) ● Spec. density 2.17g/cm³(20℃) ● Solub. in H_2O 358g/l (20℃) ● pH value 4.5 – 7.0 (100 g/l, H_2O, 20℃) ● Melting point 801℃ ● Bulk density ~ 1140kg/m³ ● Boiling point 1461℃ (1013hPa)

● IMDG No Dangerous Good ● HS Code 2501 00 91
● RTECS VZ4725000 ● Merck Index 10, 8430

Sodium Chloride — Extra Pure

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 5.0 ~ 8.0
Iodine & Bromine ····· To pass test
Phosphate (PO_4) ····· Max 0.001%
Sulfate (SO_4) ····· Max 0.005%
Calcium(Ca) ····· Max 0.003%
Barium (Ba) ····· Max 0.002%
Lead (Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
82	500g	3,800
81	1kg	5,600
83	25kg	52,500

Sodium Chloride — GR

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.5%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 5.0 ~ 8.0
Iodine & Bromine ····· To pass test
Phosphate (PO_4) ····· Max 5ppm
Sulfate (SO_4) ····· Max 0.002%
Total Nitrogen (as N) ····· Max 0.001%
Potassium(K) ····· Max 0.005%
Copper (Cu) ····· Max 2ppm
Magnesium (Mg) ····· Max 0.002%
Calcium(Ca) ····· Max 0.002%
Barium (Ba) ····· Max 0.001%
Lead (Pb) ····· Max 2ppm
Iron(Fe) ····· Max 2ppm
hexacyanoferrate [$Fe(CN)_6$)] ····· Max.1ppm

Product No.	Packing	Price(₩)
84	500g	4,400
2445	1kg	7,500

Sodium Chloride — KP

성상 ····· 무색, 흰색의 결정 또는 결정성 가루.
확인시험 ····· 나트륨염의 정성반응
염화물의 정성반응

순도시험
용해상태 ····· 무색이며 맑다.
산 또는 알칼리 ····· 0.01mol/L 염산에 황색변화
0.01mol/L 수산화나트륨액에 청색변화
황산염 ····· 액의 혼탁은 비교액보다 진하지 않다.
인산염 ····· 액의 색은 비교액보다 진하지 않다.
브롬화물 ····· 검액의 흡광도는 표준액의 흡광도보다 크지 않다.
요오드화물 ····· 청색을 나타내지 않는다.
페로시안화합물 ····· 10분이내에 청색을 나타내지 않는다.
아질산염(354nm) ····· Max 0.01
중금속 ····· Max 3ppm
철 ····· 액의 색은 비교액보다 진하지 않다.
바륨 ····· 액의 혼탁은 비교액보다 진하지 않다.
마그네슘 및 알칼리토류금속 ····· 액의 색은 청자색이다.
비소 ····· Max 2ppm
건조감량 (105℃,2시간) ····· Max 0.5%
함량 (건조한 후) ····· 99.5 ~ 101.0%

Product No.	Packing	Price(₩)
85	1kg	5,000
2895	20kg	40,000
1639	25kg	50,000

1N-Sodium Chloride (1M) — Normal

1N(1M) 염화나트륨

Product No.	Packing	Price(₩)
1413	500㎖	5,300

N/10-Sodium Chloride (0.1M) — Normal

N/10(0.1M) 염화나트륨

Product No.	Packing	Price(₩)
1414	500㎖	5,300

N/100-Sodium Chloride (0.01M) — Normal

1N(1M) 염화나트륨

Product No.	Packing	Price(₩)
1415	500㎖	5,300

Sodium Chlorite — Extra Pure

아염소산나트륨

● CAS No. 7758-19-2 ● $NaClO_2$ ● FW 90.44

● Spec. density 1.21 g/cm³(20% Sol'n, 20℃) ● Boiling point ~ 100℃

● IMDG UN 1496 SODIUM CHLORITE, 5.1, II ● HS Code 2828 90 30

Appearance ····· White crystalline powder.

Assay ····· Min 78.0%
Solubility in water ····· To pass test
Heavy metals (as Pb) ····· Max 0.002%
Arsenic (As) ····· Max 0.5ppm
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
2447	500g	16,300
1416	1kg	31,000

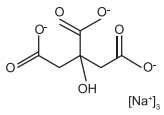
Sodium Chromate tetrahydrate — Extra Pure

크롬산나트륨
● CAS No. 10034-82-9 ● $Na_2CrO_4 \cdot 4H_2O$ ● FW 234.06

Appearance ····· Yellow crystal.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 8.5 ~ 9.8
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.05%
Calcium(Ca) ····· Max 0.05%

Product No.	Packing	Price(₩)
1417	25g	7,000
1418	500g	27,000

Sodium Citrate tribasic dihydrate — Extra Pure



시트르산나트륨, 구연산나트륨, Trisodium citrate dihydrate
● CAS No. 6132-04-3 ● EC No. 200-675-3
● $C_6H_5Na_3O_7 \cdot 2H_2O$ ● FW 294.10

● Spec. density 1.76g/cm³ ● Solub. in H_2O 720g/l (25℃) ● pH value 7.5 – 9.0 (50g/l, H_2O, 25℃) ● Melting point 150℃ (anhydrous substance) ● Bulk density ~ 600kg/m³

● IMDG No Dangerous Good ● HS Code 2918 15 00
● Merck Index 10, 8435

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
pH(5%) ····· 7.8 ~ 9.0
Chlorice (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.02%
Calcium (Ca) ····· Max 0.02%
Ammonium (NH_4) ····· Max 0.005%
Lead (Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
1420	500g	7,500
1421	1kg	12,500
1422	25kg	150,000

Sodium Cobaltnitrite — Extra Pure

코발트아질산나트륨, Sodium Hexanitrocobaltate(Ⅲ)
● CAS No. 13600-98-1
● $Na_3[Co(NO_2)_6]$ ● FW 403.98

Appearance ····· Brownish yellow crystalline powder.
Suitability for K determination ····· To pass test
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.01%
Iron (Fe) ····· Max 0.002%
Sensitivity to K ····· Min 1:10000

Product No.	Packing	Price(₩)
4025	25g	11,000
4024	500g	120,000

Sodium Cyanide — Extra Pure

시안화나트륨
● CAS No. 143-33-9 ● EC No. 209-599-4
● NaCN ● FW 49.00

● Spec. density 1.6g/cm³(20℃) ● Solub. in H_2O 370g/l (20℃) ● pH value ~ 11.7 (100g/l, H_2O, 20℃) ● Melting point 563℃ ● Bulk density ~ 750 – 900kg/m³ ● Boiling point 1496℃

● IMDG UN 1689 SODIUM SYANIDE, SOLID, 6.1, I, Marine Pollutant: P
● HS Code 2837 11 00

Appearance ····· Colorless, white crystalline powder or granular, slice.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.15%
Phosphate (PO_4) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.05%
Sulfide(S) ····· Max 0.005%
Thiocyanate ····· Max 0.02%
Iron (Fe) ····· Max 0.005%
Lead (Pb) ····· Max 5ppm

Product No.	Packing	Price(₩)
1426	1kg	15,000

Sodium Dichromate dihydrate — Extra Pure

중크롬산나트륨, Sodium bichromate, Sodium pyrochromate
● CAS No. 7789-12-0 ● EC No. 234-190-3 ● $Na_2Cr_2O_7 \cdot 2H_2O$ ● FW 298.00

● Spec. density 2.35 g/cm³(20℃) ● Solub. in H_2O 731.8g/l (20℃) ● pH value 3.5 (100 g/l, H_2O, 20℃) ● Melting point 356.7℃ (anhydrous substance) ● Bulk density ~ 1200kg/m³ ● Boiling point 400℃ (decomposition)

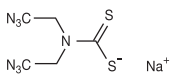
● IMDG UN 3288 TOXIC SOLID, INORGANIC, N.O.S. (SODIUM DICHROMATE), 6.1, II
● HS Code 2841 30 00 ● RTECS HX7750000

Appearance ····· Orange-red colored crystal, deliquescent.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.05%
Calcium(Ca) ····· Max 0.1%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
932	500g	7,500
933	1kg	12,500

Sodium N,N-diethyldithiocarbamate trihydrate — Extra Pure / AR

NEW



Diethyldithiocarbamic acid sodium salt
● CAS No. 20624-25-3 ● EC No. 205-710-6
● $C_5H_{10}NNaS_2 \cdot 3H_2O$ ● FW 225.31

● Solub. in H_2O 600 g/l (20 ℃) ● pH value 7 (20 g/l, H_2O, 20 ℃) ● Melting point 93 ℃

● HS Code 2930 20 00

Product No.	Packing	Price(₩)
5205	25g	21,800

Sodium dihydrogen phosphate dihydrate
→ *go to Sodium Phosphate monobasic dihydrate*

S

Sodium dihydrogenphosphate monohydrate
→ *go to Sodium Phosphate monbasic monohydrate*

Sodium diphosphate anhydrous
→ *go to Sodium Pyrophosphate anhydrous*

Sodium disulfite → *go to Sodium Metabisulfite*

Sodium dithionite → *go to Sodium Hydrosulfite*

Sodium dodecyl sulfate → *go to Sodium Lauryl Sulfate*

Sodium Fluoride CP

플루오르화나트륨
● CAS No. 7681-49-4 ● EC No. 234-190-3 ● NaF ● FW 41.98

● Vapour pressure 1hPa (1077℃) ● Spec. density 2.8g/cm³ (20℃) ● Solub. in H_2O 42g/l (20℃) ● pH value ~ 10.2(40g/l, H_2O, 20℃) ● Melting point 993℃ ● Boiling point 1704℃

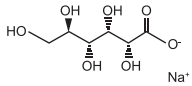
● IMDG UN 1690 SODIUM FLUORIDE, SOLID, 6.1, III ● HS Code 2826 19 10
● RTECS WB0350000 ● Merck Index 10, 8452

Appearance ····· White crystalline powder.
Assay ····· Min 97.0%
Water ····· Max 0.05%

Product No.	Packing	Price(₩)
1437	500g	11,400

Sodium formaldesulfoxylate hydrate → *go to Rongalite*

Sodium Gluconate Extra Pure



클루콘산나트륨
● CAS No. 527-07-1 ● EC No. 208-407-7
● $HOCH_2(CHOH)_4COONa$ ● FW 218.14

● Solub. in H_2O 590 g/l (25℃) ● pH value 7.0 – 8.0 (100g/l, H_2O, 20℃) ● Melting point 170 – 175℃ ● Ignition temp. > 200℃

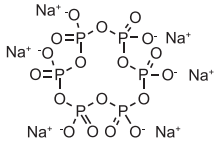
● IMDG No Dangerous Good ● HS Code 2918 16 00 ● RTECS LZ5235000

Product No.	Packing	Price(₩)
1439	500g	8,800

Sodium hexafluoro silicate → *go to Sodium Silicofluoride*

Sodium hexahydroxostannate → *go to Sodium Stannate trihydrate*

Sodium Hexametaphosphate Extra Pure



헥사메타인산나트륨
● CAS No. 10124-56-8
● $(NaPO_3)_6$ ● FW 611.57

Appearance ····· Colorless lump or white powder.
Assay (as P_2O_5) ····· 65.0 ~ 70.0%

Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.03%
Phosphate (PO_4) ····· To pass test
Heavy metals (as Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.02%
Substances reducing permanganate(asH_3PO_3) ····· To pass test
Arsenic (As) ····· Max 3ppm

Product No.	Packing	Price(₩)
1440	500g	5,000
1441	1kg	9,000

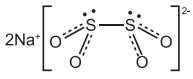
Sodium Hexanitrocobaltate(Ⅲ) → *go to Sodium Cobaltnitrite*

Sodium hydrogen carbonate → *go to Sodium Bicarbonate*

Sodium hydrogen sulfate monohydrate
→ *go to Sodium Bisulfate monohydrate*

Sodium hydrogen sulfite → *go to Sodium Bisulfite*

Sodium Hydrosulfite CP



차아황산나트륨(하이드로), Sodium dithionite
● CAS No. 7775-14-6 ● EC No. 231-890-0
● $Na_2S_2O_4$ ● FW 174.10

● Spec. density 2.5g/cm³ (20℃) ● Flash point > 100℃ (DIN 51798) ● Solub. in H_2O 250g/l (20℃) (slow decomposition) ● pH value ~7 – 9 (50g/l, H_2O, 20℃) ● Melting point ~ 100℃ (decomposition) ● Bulk density ~ 1250kg/m³ ● Ignition temp. > 200℃ (DIN 51794)

● IMDG UN 1384 SODIUM DITHIONITE, 4.2, II ● HS Code 2831 10 00
● Merck Index 10, 8461

Assay ····· Min 80.0%

Product No.	Packing	Price(₩)
1442	500g	8,000

Sodium Hydroxide

수산화나트륨(가성소다), Soda caustic
● CAS No. 1310-73-2 ● EC No. 215-185-5 ● NaOH ● FW 40.00

● Spec. density 2.13g/cm³(20℃) ● Solub. in H_2O 1090g/l (20℃) ● pH value ~14 (50 g/l, H_2O, 20℃) ● Melting point 323℃ ● Boiling point 1390℃ (1013hPa)

● IMDG UN 1823 SODIUM HYDROXIDE, SOLID, 8, II ● HS Code 2815 11 00
● RTECS WB4900000 ● Merck Index 10, 8462

Sodium Hydroxide Extra Pure

Appearance ····· White solid, hygroscopic.
Assay ····· Min 93.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Silicate (SiO_2) ····· Max 0.04%
Sulfate (SO_4) ····· Max 0.004%
Total Nitrogen (as N) ····· Max 0.002%
Potassium(K) ····· Max 0.4%
Aluminium (Al) ····· Max 0.005%
Lead (Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.0015%
Sodium carbonate (Na_2CO_3) ····· Max 2.0%

Product No.	Packing	Price(₩)
1637	500g	5,600
1636	1kg	7,500
1638	20kg	50,000

Sodium Hydroxide GR

Product No.	Packing	Price(₩)
1443	1kg	11,000
2471	15kg	100,000

Sodium Hydroxide 10% Extra Pure

수산화나트륨 10%

Appearance	The solution is Clear and Colourless.
Assay	10.0~11.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.01%
Silicate (SiO_2)	Max 0.04%
Sulfate (SO_4)	Max 0.004%
Total Nitrogen (as N)	Max 0.002%
Potassium(K)	Max 0.4%
Aluminium (Al)	Max 0.005%
Lead (Pb)	Max 0.003%
Iron (Fe)	Max 0.0015%
Sodium carbonate (Na_2CO_3)	Max 2.0%

Product No.	Packing	Price(₩)
3153	20kg	36,000
3085	200kg	Call

Sodium Hydroxide 15% Extra Pure

수산화나트륨 15%

Appearance	The solution is Clear and Colourless.
Assay	15.0~16.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.01%
Silicate (SiO_2)	Max 0.04%
Sulfate (SO_4)	Max 0.004%
Total Nitrogen (as N)	Max 0.002%
Potassium(K)	Max 0.4%
Aluminium (Al)	Max 0.005%
Lead (Pb)	Max 0.003%
Iron (Fe)	Max 0.0015%
Sodium carbonate (Na_2CO_3)	Max 2.0%

Product No.	Packing	Price(₩)
3612	200kg	Call

Sodium Hydroxide 25% Extra Pure

수산화나트륨 25%

Appearance	Clear, colorless liquid.
Assay	25.0~30.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.01%
Silicate (SiO_2)	Max 0.04%
Sulfate (SO_4)	Max 0.004%
Total Nitrogen (as N)	Max 0.002%
Potassium(K)	Max 0.4%
Aluminium (Al)	Max 0.005%
Lead (Pb)	Max 0.003%
Iron (Fe)	Max 0.0015%
Sodium carbonate (Na_2CO_3)	Max 2.0%

Product No.	Packing	Price(₩)
1456	20kg	41,000

Sodium Hydroxide 30% Extra Pure

수산화나트륨 30%

Appearance	The solution is Clear and Colourless.
Assay	30.0~35.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.01%
Silicate (SiO_2)	Max 0.04%
Sulfate (SO_4)	Max 0.004%
Total Nitrogen (as N)	Max 0.002%
Potassium(K)	Max 0.4%
Aluminium (Al)	Max 0.005%
Lead (Pb)	Max 0.003%
Iron (Fe)	Max 0.0015%
Sodium carbonate (Na_2CO_3)	Max 2.0%

Product No.	Packing	Price(₩)
2745	20kg	41,000
1715	200kg	Call

Sodium Hydroxide 40% Extra Pure

수산화나트륨 40%

Appearance	무색등명한 액체이다.
Assay	40.0~45.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.01%
Silicate (SiO_2)	Max 0.04%
Sulfate (SO_4)	Max.0.004%
Total Nitrogen (as N)	Max 0.002%
Potassium(K)	Max 0.4%
Aluminium (Al)	Max 0.005%
Lead (Pb)	Max 0.003%
Iron (Fe)	Max 0.0015%
Sodium carbonate (Na_2CO_3)	Max 2.0%

Product No.	Packing	Price(₩)
1457	25kg	43,000

Sodium Hydroxide 45% Extra Pure

수산화나트륨 45%

Appearance	Clear, colorless liquid.
Assay	45.0~50.0%
Solubility in water	To pass test
Chloride (Cl)	Max 0.01%
Silicate (SiO_2)	Max 0.04%
Sulfate (SO_4)	Max.0.004%
Total Nitrogen (as N)	Max 0.002%
Potassium(K)	Max 0.4%
Aluminium (Al)	Max 0.005%
Lead (Pb)	Max 0.003%
Iron (Fe)	Max 0.0015%
Sodium carbonate (Na_2CO_3)	Max 2.0%

Product No.	Packing	Price(₩)
1458	25kg	43,000

S

Sodium Hydroxide 50% — Extra Pure

Appearance ····· Clear, colorless liquid.
Assay ····· 50.0~55.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Silicate (SiO_2) ····· Max 0.04%
Sulfate (SO_4) ····· Max.0.004%
Total Nitrogen (as N) ····· Max 0.002%
Potassium(K) ····· Max 0.4%
Aluminium (Al) ····· Max 0.005%
Lead (Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.0015%
Sodium carbonate (Na_2CO_3) ····· Max 2.0%

Product No.	Packing	Price(₩)
1746	25kg	43,000

5N - Sodium Hydroxide (5M) — Normal

5N(5M) 수산화나트륨

Assay ····· 19.4 ~ 19.9%

Product No.	Packing	Price(₩)
2856	500㎖	6,300
2855	1 ℓ	11,300

2N - Sodium Hydroxide (2M) — Normal

2N(2M) 수산화나트륨

Appearance ····· To pass test
Factor (at.20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1446	500㎖	6,900

1N - Sodium Hydroxide (1M) — Normal

1N(1M) 수산화나트륨

Appearance ····· To pass test
Factor (at.20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1447	500㎖	5,300
1448	1 ℓ	8,800

N/2 - Sodium Hydroxide (0.5M) — Normal

N/2(0.5M) 수산화나트륨

Appearance ····· To pass test
Factor (at.20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1449	500㎖	6,000
3703	1 ℓ	8,800

N/5 - Sodium Hydroxide (0.2M) — Normal

N/5(0.2M) 수산화나트륨

Product No.	Packing	Price(₩)
1450	500㎖	5,500

N/10 - Sodium Hydroxide (0.1M) — Normal

N/10(0.1M) 수산화나트륨

Appearance ····· To pass test
Factor (at.20) ····· 1.000 ~ 1.005℃

Product No.	Packing	Price(₩)
1451	500㎖	5,000
1452	1 ℓ	8,800

N/20 - Sodium Hydroxide (0.05M) — Normal

N/20(0.05M) 수산화나트륨

Product No.	Packing	Price(₩)
1453	500㎖	5,500
4045	1 ℓ	8,800

N/40 - Sodium Hydroxide (0.025M) — Normal

N/40(0.025M) 수산화나트륨

Appearance ····· To pass test
Factor (at.20℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1454	500㎖	5,000
1455	1 ℓ	8,800

Sodium Hypochlorite solution — CP

차아염소산나트륨
● CAS No. 7681-52-9 ● NaOCl ● FW 74.44

● Vapour pressure 20hPa (20℃) ● Spec. density 1.22 – 1.25g/cm³(20℃) ● Solub. in H_2O (20℃) soluble ● pH value 12 –13 (20℃) ● Melting point –20℃ ● Boiling point 102℃

● IMDG UN 1791 HYPOCHILORITE SOLUTION, 8, II ● HS Code 2828 90 00
● Merck Index 10, 8463

Appearance ····· Colorless to light greenish yellow color, chlorine odor.
Assay (at the time of pakaging) ····· Min 12.0%

Product No.	Packing	Price(₩)
5468	500g	3,800
5460	1kg	5,000

Sodium hypophosphite monohydrate
→ *go to Sodium Phosphinate monohydrate*

Sodium Iodide — Extra Pure

아이오딘산나트륨
● CAS No. 7681-82-5 ● EC No. 231-679-3 ● NaI ● FW 149.89

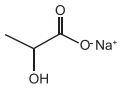
● Vapour pressure 1.3hPa (767℃) ● Spec. density 3.67g/cm³ (20℃) ● Solub. in H_2O 1793g/l (20℃) ● pH value ~6 – 9 (50g/l, H_2O, 25℃) ● Melting point 662℃ ● Bulk density ~ 1500 – 2000 kg/m³ ● Boiling point 1304℃

● IMDG No Dangerous Good ● HS Code 2827 60 00
● RTECS WB6475000 ● Merck Index 10, 8469

Appearance ····· Colorless crystal or white crystalline powder.
Assay (after dried at.110℃) ····· Min 99.0%
Solubility in water ····· To pass test
Loss on drying (at.110℃, 2hr.) ····· Max 2.0%
Chloride&Bromide(asCl) ····· Max 0.1%
Iodate & Thiosulfate ····· To pass test
Sulfate (SO_4) ····· Max 0.05%
Heavy metals (as Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.002%
Calcium & other alkaline earths (as Ca) ····· To pass test

Product No.	Packing	Price(₩)
1463	500g	81,300

Sodium Lactate 50% solution — Extra Pure

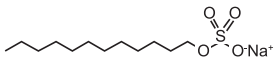


젖산나트륨
- CAS No. 72-17-3
- $CH_3CH(OH)COONa$ • FW 112.06
- Spec. density 1.263g/cm³(20℃) • Solub. in H_2O(20℃) soluble • pH value 6 (500g/l, H_2O, 20℃) • Boiling point 109℃
- IMDG No Danderous Good • HS Code 2837 11 00 • Merck Index 10, 8473

Appearance ····· Clear & colorless syrup-type liquid.
pH ····· Max 5.0 ~ 9.0
Citric acid, Oxalic acid, Tartaric acid & Phosphoric acid ····· To pass test
Sulfate (SO_4) ····· To pass test
Heavy metals (Pb) ····· Max 10ppm
Chlorides (Cl) ····· To pass test
Assay ····· Min 50.0%

Product No.	Packing	Price(₩)
1464	500g	10,000

Sodium Lauryl Sulfate — Extra Pure



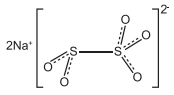
라우릴황산나트륨 Sodium dodecyl sulfate
- CAS No. 151-21-3 • EC No. 205-788-1
- $CH_3(CH_2)_{11}OSO_3Na$ • FW 288.38
- Spec. density 1.1g/cm³(20℃) • Flash point > 150℃ • Solub. in H_2O 150g/l (20℃) • pH value 6 – 9 (10 g/l, H_2O, 20℃) • Melting point 204 – 207℃ • Bulk density ~ 490 – 560kg/m³

- IMDG UN 1325 FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM DODECYL SULFATE), 4.1, III • HS Code 2920 90 10

Appearance ····· White to pale yellow crystal or powder.
pH (1 % Aq Sol'n) ····· 7.0 ~ 9.0
Alkalinity ····· To pass test
Sodium Chloride ····· Max 2.0%
Water ····· Max 2.0%

Product No.	Packing	Price(₩)
1436	500g	9,800

Sodium Metabisulfite — Extra Pure



메타중아황산나트륨, Sodium disulfite
- CAS No. 7681-57-4 • EC No. 231-673-0
- $Na_2S_2O_5$ • FW 190.10
- Spec. density 1.48g/cm³(20℃) • Solub. in H_2O 650 g/l (20℃) • pH value 3.5 – 5 (50g/l, H_2O, 20℃) • Melting point ~ 150℃ (decomposition) • Bulk density 1100 – 1200kg/m³

- IMDG No Dangerous Good • HS Code 2831 10 00
- RTECS UX8225000 • Merck Index 10, 8476

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.02%
Arsenic (As) ····· Max 4ppm
Iron (Fe) ····· Max 0.004%
Heavy metals (as Pb) ····· Max 0.004%

Product No.	Packing	Price(₩)
1466	500g	5,000
1467	1kg	8,800

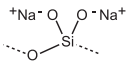
Sodium, metal — CP

나트륨
- CAS No. 7440-23-5 • EC No. 231-132-9 • Na • FW 22.99
- Vapour pressure 1.6 hPa (400℃) • Spec. density 0.97 g/cm³ (20℃) • Solub. in H_2O explosion decompostion • Melting point 97.8℃

- IMDG UN1428, 4.3, I • HS Code 2805 11 00
- 3류 나트륨 10kg

Product No.	Packing	Price(₩)
1469	500g	18,000

Sodium Metasilicate nonahydrate — Extra Pure



메타규산나트륨
- CAS No. 13517-24-3 • $Na_2SiO_3 \cdot 9H_2O$ • FW 284.19
- Spec density 2.610g/cm³ • Melting point 1089℃

Silicon dioxide ····· 19 ~ 22.0%
Sodium dioxide ····· 20 ~ 22.0%
Iron (Fe) ····· Max 0.05%

Product No.	Packing	Price(₩)
302	500g	5,000

Sodium Methoxide 30% sodution in methanol — Extra Pure

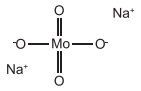
나트륨메톡사이드 용액 30% 메탄올 용액
- CAS No. 124-41-4
- Vapour pressure 28hPa (20℃) • Spec. density ~ 0.97g/cm³ (20℃) • Explosive limit 5.5 – 36.5 Vol% (methanol) • Flash point 32℃ • Solub. in H_2O (20℃) (reaction) • pH value 13 (20g/l, H_2O, 20℃) • Melting point 2 – 6℃ • Boiling point 92℃ (1013hPa) • Ignition temp. 315℃

- IMDG UN 1289 SODIUM METHYLATE SOLUTION, 3(8), III
- HS Code 3824 90 98 • Merck Index 10, 8481

Product No.	Packing	Price(₩)
1471	1 ℓ	17,500

S

Sodium Molybdate dihydrate — Extra Pure



몰리브덴산나트륨
● CAS No. 10102-40-6 ● EC No. 231-551-7
● $Na_2MoO_4 \cdot 2H_2O$ ● FW 241.95

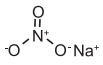
● Spec. density 2.71g/cm³ (22℃) ● Solub. in H_2O 840 g/l (20℃) ● pH value 9-10 (840g/l, H_2O, 20℃) ● Melting point 687℃ (release of crystalline water) ● Bulk density 1000 – 1400 kg/m³ ● Decomposion point (release of crystalline water)

● IMDG No Dangerous Good ● HS Code 2841 70 00
● RTECS QA5085000 ● Merck Index 10, 8483

Appearance ····· Clorless or white crystal or crystalline powder.
Assay ····· Min 98.5%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· Max 10%
Chloride (Cl) ····· Max 0.02%
Nitrate (NO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.02%
Heavy metal & Iron ····· To pass test
Ammonium (NH_4) ····· Max 0.02%

Product No.	Packing	Price(₩)
1472	500g	47,500

Sodium Nitrate — Extra Pure



질산나트륨, Nitric acid sodium salt
● CAS No. 7631-99-4 ● EC No. 231-554-3
● $NaNO_3$ ● FW 84.99

● Spec. density 2.26g/cm³ (22℃) ● Solub. in H_2O 874 g/l (20℃) ● pH value 5.5 – 8.0 (50g/l, H_2O, 20℃) ● Melting point 308℃ ● Bulk density ~ 1200kg/m³

● IMDG UN 1498 SODIUM NITRATE, 5.1, III ● HS Code 3102 50 90
● RTECS WC5600000 ● 1류질산염류 300kg ● Merck Index 10, 8485

Appearance ····· Clorless crystal or white crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.006%
Nitrite(NO_2) ····· To pass test%
Phosphate (PO_4) ····· Max 0.001ppm
Sulfate (SO_4) ····· Max 0.01%
Calcium ····· To pass test
Hyavy metals (Pb) ····· Max 0.001%
Ammonium (NH_4) ····· Max 0.003%
Potassium(K) ····· Max 0.005%

Product No.	Packing	Price(₩)
1475	500g	5,600

Sodium Nitrite — Extra Pure

아질산나트륨
● CAS No. 7632-00-0 ● EC No. 231-555-9 ● $NaNO_2$ ● FW 69.00

● Spec. density 2.1g/cm³ (20℃) ● Solub. in H_2O 820g/l (20℃) ● pH value 9 (100g/l, H_2O, 20℃) ● Melting point 280℃ (decomposition) ● Bulk density 1200kg/m³ ● Boiling point 320℃ (decomposion)

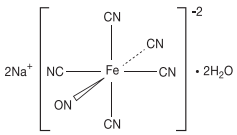
● IMDG UN 1500 SODIUM NITRITE, 5.1 (6.1), III ● HS Code 2834 10 00
● 1류아경산염류 300kg ● Merck Index 10, 8486

Appearance ····· White to pale yellow crystalline powder, deliquescent.
Assay ····· Min 97.0%
Solubility in water ····· To pass test
Loss on drying(at.105 ℃, 5hr.) ····· Max 1.0%
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_3) ····· Max 0.01%
Lead (Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
1478	500g	5,600
2815	25kg	112,500

Sodium nitroferricyanide dihydrate → *go to Sodium Nitroprusside*

Sodium Nitroprusside — Extra Pure NEW



니트로페리시안화나트륨 2수화물
Sodium nitroferricyanide dihydrate
● CAS No. 13755-38-9
● $Na_2[Fe(CN)_5]NO \cdot 2H_2O$ ● FW 297.95

● Spec. density 1.72 g/cm³

● IMDG UN 3288 TOXIC SOLID, INORGANIC, N.O.S., 6.1, III ● HS Code 2837 20 00
● RTECS LJ8925000 ● Merck Index 14, 8649

Appearance ····· Ruby red crystal.
Assay ····· Min 98.0%
Ferricyanide ····· Max 0.02%
Ferrocyanide ····· Max 0.1%
Sulfate (SO_4) ····· Max 0.05%

Product No.	Packing	Price(₩)
4926	25g	15,000

Sodium octadecanoate → *go to Sodium Stearate*

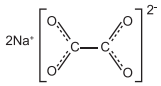
Sodium Orthosilicate — Extra Pure

오쏘규산나트륨
● CAS No. 13472-30-5(anh.) ● $2Na_2O \cdot SiO_2 \cdot nH_2O$ ● FW 84.04(anh.)

● Melting point 1018

Product No.	Packing	Price(₩)
2501	500g	7,500

Sodium Oxalate — Extra Pure



옥살산나트륨, Disodium oxalate, Soerensen's buffer substances
● CAS No. 62-76-0 ● EC No. 200-550-3
● NaOOCCOONa ● FW 134.00

● Spec. density 2.27g/cm³ (20℃) ● Solub. in H_2O 37g/l (20℃) ● pH value ~8 (30g/l, H_2O, 20℃) ● Melting point 250 – 270℃ (decomposition) ● Bulk density ~ 600kg/m³

● IMDG No Dangerous Good ● HS Code 2917 11 00
● RTECS KI1750000 ● Merck Index 10, 8489

Appearance ····· Coloeless crystal or white crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Acid salt ($NaHC_2O_2$) ····· Max 0.04%
Basic salt (Na_2CO_3) ····· Max 0.04%
Chloride (Cl) ····· Max 0.006%
Sulfate (SO_4) ····· Max 0.02%
Potassium (K) ····· Max 0.02
Heavy metals (as Pb) ····· Max 0.002%

Iron (Fe) ····· Max 0.002%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
1390	500g	11,000

N/10 - Sodium Oxalate (0.05M) Normal

N/10 (0.05M) 옥살산 나트륨
● CAS No. 62-76-0

appearance ····· to pass test
Factor(at 20 ℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
1391	500㎖	5,300
1392	1 ℓ	8,800

N/40 - Sodium Oxalate (0.0125M) Normal

N/40 (0.0125M) 옥살산 나트륨
● CAS No. 62-76-0

appearance ····· to pass test
Factor(at 20 ℃) ····· 1.000 ~ 1.005

Product No.	Packing	Price(₩)
3011	1 ℓ	9,400

Sodium Perborate tetrahydrate Extra Pure

과붕산나트륨, Sodium Peroxoborate tetrahydrate
● CAS No. 10486-00-7 ● $NaBO_3 \cdot 4H_2O$ ● FW 153.88

Appearance ····· White crystalline powder.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.02%
Heavy metals (as Pb) ····· Max 0.005%
Iron (Fe) ····· Max 0.003%

Product No.	Packing	Price(₩)
1479	500g	8,000

Sodium Percarbonate Extra Pure

과탄산나트륨
● CAS No. 15630-89-4 ● $Na_2Co_3 \cdot 1.5H_2O_2$ ● FW 157.01

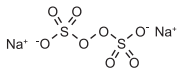
Appearance ····· White crystalline grain or powder, no odor.
Assay ····· 80.0 ~ 92.0%
Solubility in water ····· to pass test
PH(3% Sol.) ····· 10.0 ~ 11.0
Chloride (Cl) ····· Max 4%
Sulfate (SO_4) ····· Max 1.5ppm
Arsenic (As) ····· Max 2ppm
Sodium peroxide ····· 20~26㎖

Product No.	Packing	Price(₩)
1480	500g	7,500
2488	1kg	12,500

Sodium peroxidisulfate → *go to Sodium Persulfate*

Sodium peroxoborate tetrahydrate
→ *go to Sodium Perborate tetrahydrate*

Sodium Persulfate Extra Pure



과황산나트륨, Sodium peroxidisulfate, Sodium peroxo-sulfate
● CAS No. 7775-27-1 ● EC No. 231-892-1
● $Na_2S_2O_8$ ● FW 238.09

● Spec. density 2.40g/cm³ (22℃) ● Solub. in H_2O 545 g/l (20℃) ● pH value 3.5 – 3.8 (100g/l, H_2O, 20℃)
● Bulk density ~ 1150kg/m³

● IMDG UN 1505 SODIUM PERSULPHATE, 5.1, III ● HS Code 2833 40 00
● 1류 퍼옥소이황산염류 300kg ● Merck Index 10, 8496

Appearance ····· White to pale yellow colored crystalline powder.
Assay ····· 95.0 ~ 100.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Nitrogen ····· Max 0.2%
Manganese (Mn) ····· Max 0.001%
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
1482	500g	7,000
5318	1kg	11,400
1483	25kg	165,000

Sodium Phosphate dibasic 12-water Extra Pure

제이인산나트륨, Disodium hydrogen phosphate dibasic 12-water
● CAS No. 10039-32-4 ● EC No. 231-448-7 ● $Na_2HPO_4 \cdot 12H_2O$ ● FW 358.14

● Spec. density 1.52g/cm³ (20℃) ● Solub. in H_2O 218 g/l (20℃) ● pH value ~9.0 – 9.4 (50g/l, H_2O, 20℃) ● Melting point 35℃ ● Bulk density ~ 800 – 900 kg/m³

● IMDG No Dangerous Good ● HS Code 2835 22 00
● Merck Index 10, 8500

Appearance ····· White crystal or crystalline lump, deliquescent.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 9.0 ~ 9.4
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.02%
Heavy metals (as Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.002%
Arsenic (As) ····· Max 2ppm
Potassium (K) ····· To pass test
Nitrate (N) ····· To pass test

Product No.	Packing	Price(₩)
1486	500g	4,400
1487	1kg	7,500
1488	25kg	87,500

S

Sodium Phosphate dibasic anhydrous — Extra Pure

제이인산나트륨, 무수, Disodium Hydrogen Phosphate anhydrous
● CAS No. 7558-79-4 ● EC No. 231-448-7 ● Na_2HPO_4 ● FW 141.96

● Solub. in H_2O 77g/l (20℃) ● pH value 8.7 – 9.3 (10g/l, H_2O, 20℃) ● Melting point ~ 250℃ (decomposition) ● Bulk density ~ 880kg/m³

● IMDG No Dangerous Good ● HS Code 2835 22 00 ● RTECS WC4500000

Appearance ····· White powder, hygroscopic.
Assay (after dried at.110℃) ····· Min 99.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 8.9 ~ 9.3
Loss on drying (at.110℃) ····· Max 5.0%
Chloride (Cl) ····· Max. 0.01%
Sulfate (SO_4) ····· Max. 0.02%
Heavy metals (as Pb) ····· Max. 0.004%
Iron (Fe) ····· Max. 0.002%
Arsenic (As) ····· Max. 3ppm

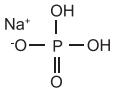
Product No.	Packing	Price(₩)
1490	500g	7,500
3173	1kg	12,500
1491	25kg	187,500

Sodium Phosphate dibasic dihydrate — Extra Pure

● CAS No. 10028-24-7
● $Na_2HPO_4 \cdot 2H_2O$ ● FW 177.99

Product No.	Packing	Price(₩)
4160	1kg	18,000

Sodium Phosphate monobasic anhydrous — Extra Pure



인산2수소나트륨 , Sodium Dihydrogenphosphate, Monosodium phosphate
● CAS No. 7758-80-7 ● EC No. 231-449-2
● NaH_2PO_4 ● FW 119.98

● Solub. in H_2O 599 g/ℓ (0℃) ● pH value 4.0~4.5 (50 g/ℓ, H_2O, 25℃)

Appearance ····· White powder.
Assay ····· Min 98.0%
Water insoluble matter ····· Max 0.2%
Loss on drying (at 105℃, 4hr) ····· Max 2.0%
pH (1% Sol.) ····· 4.2 ~ 4.6
Lead (Pb) ····· Max 4 ppm
Arsenic (As) ····· Max 4 ppm
Cadmium (Cd) ····· Max 1 ppm
Free acid & Sodium Phosphate Dibasic ····· Max 1N-NaOH 0.3ml

Product No.	Packing	Price(₩)
3989	1kg	11,900

Sodium Phosphate monobasic dihydrate — Extra Pure

제일인산나트륨, Sodium dihydrogen phosphate dihydrate
● CAS No. 13472-35-0 ● EC No. 231-449-2 ● $NaH_2PO_4 \cdot 2H_2O$ ● FW 156.01

● Spec. density 1.915g/cm³ (20℃) ● Solub. in H_2O 850g/l (20℃) ● pH value 4.5 (12g/l, H_2O, 25℃) ● Melting point 60℃ ● Bulk density ~ 1000kg/m³

● IMDG No Dangerous Good ● HS Code 2835 22 00
● RTECS WA1900500

Appearance ····· White crystal or crystalline powder, hygroscopic.
Assay ····· 98.0 ~ 102.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 4.1 ~ 4.5
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.005%
Heavy metals (as Pb) ····· Max 0.003%
Arsenic (As) ····· Max 3ppm
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
1429	500g	5,600
2931	1kg	9,400
1430	25kg	112,500

Sodium Phosphate monobasic monohydrate — Extra Pure

인산2수소나트륨1수화물 , Sodium Dihydrogenphosphate monohydrate, Monosodium phosphate monohydrate
● CAS No. 10049-21-5 ● EC No. 231-449-2 ● $NaH_2PO_4 \cdot H_2O$ ● FW 137.99

● Vapour pressure 2.04 g/cm³ (20℃) ● Solub. in H_2O 850g/ℓ (20℃) ● pH value 4.1~4.5 (50g/ℓ, H_2O, 25℃) ● Bulk density 880 kg/m³

● HS Code 2835 22 00

Appearance ····· White crystal.
Assay ····· Min 97.0%
pH (1% sol' n) ····· 4.2 ~ 4.6
Lead (Pb) ····· Max 4 ppm
Arsenic (As) ····· Max 4 ppm
Cadmium (Cd) ····· Max 1 ppm
Hydrargyrum (Hg) ····· Max 1 ppm
Fluoride (F) ····· Max 10 ppm
Dry loss ····· Max 15.0%
Water insoluble ····· Max 0.2%

Product No.	Packing	Price(₩)
3787	500g	16,300

Sodium Phosphate tribasic 12-water — Extra Pure

제삼인산나트륨, Trisodium phosphate
● CAS No. 10101-89-0 ● EC No. 231-509-8 ● $Na_3PO_4 \cdot 12H_2O$ ● FW 380.11

● Spec. density 1.62g/cm³ (20℃) ● Solub. in H_2O 285g/l (20℃) ● pH value ~ 12 (10g/l, H_2O, 20℃) ● Melting point ~ 75℃ (release of crystalline water) ● Bulk density ~ 620kg/m³

● IMDG No Dangerous Good ● HS Code 2835 29 30
● RTECS TC9575000 ● Merck Index 10, 8503

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Sulfate (SO_4) ····· Max 0.02%
Heavy metals (as Pb) ····· Max 0.002%
Arsenic (As) ····· Max 2ppm
Alkalies (as NaOH) ····· Max 3.0%
Dibasic salts (Na_2HPO_4) ····· Max 1.0%

Product No.	Packing	Price(₩)
1493	500g	4,400
1494	1kg	7,000
1495	25kg	93,800

Sodium Phosphinate monohydrate — Extra Pure

차아인산나트륨, Sodium hypophosphite monohydrate
● CAS No. 10039-56-2 ● EC No. 231-669-9 ● $NaH_2PO_2 \cdot H_2O$ ● FW 105.99

● Vapour pressure 30hPa(20℃) ● Spec. density 1.81g/cm³ ● Solub. in H_2O 1100g/l (20℃) ● pH value 6.0 – 8.0(10g/l, H_2O, 20℃) ● Bulk density ~ 1000kg/m³ ● Decomposition point (anhydrous substance)

● IMDG No Dangerous Good ● HS Code 2835 10 00

● RTECS SZ5640000 ● Merck Index 10, 8467

Appearance ····· Colorless crystal or white crystalline powder.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.03%
Heavy metals (as Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.005%
Arsenic (As) ····· Max 0.02%

Product No.	Packing	Price(₩)
2945	500g	11,900
1461	1kg	18,800
1462	20kg	283,500
4898	25kg	354,400

Sodium Pyrophosphate anhydrous — Extra Pure

피로인산나트륨, 무수 Sodium Diphosphate anhydrous
● CAS No. 7722-88-5 ● $Na_4P_2O_7$ ● FW 265.90

Appearance ····· White crystalline powder.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.005%
Nitrate (NO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.02%
Heavy metals (as Pb) ····· Max 0.002%
Arsenic (As) ····· Max 2ppm
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
1431	500g	6,900
1432	25kg	151,300

Sodium Pyrophosphate decahydrate — Extra Pure

피로인산나트륨, Sodium Diphosphate decahydrate
● CAS No. 13472-36-1 ● EC No. 231-767-1 ● $Na_4P_2O_7 \cdot 10H_2O$ ● FW 446.05

● Spec. density 1.82g/cm³ (20℃) ● Solub. in H_2O 60g/l (20℃) ● pH value 9.5 – 10.5 (50g/l, H_2O, 20℃) ● Melting point 990℃ (anhydorus substance) ● Bulk density ~ 650kg/m³ ● Decomposition (release of crystalline water)

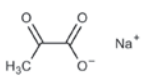
● IMDG No Dangerous Good ● HS Code 2835 39 00
● Merck Index 10, 9063

Appearance ····· White crystal, deliquescent, efflorescence.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.005%
Nitrate (NO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.02%
Heavy metals (as Pb) ····· Max 0.002%
Arsenic (As) ····· Max 2ppm
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
1433	500g	7,500
1434	1kg	11,900
1435	25kg	151,300

NEW

Sodium Pyruvate — Extra Pure



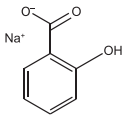
피루브산나트륨
● CAS No. 113-24-6 ● EC No. 204-024-4
● $C_3H_3NaO_3$ ● FW 110.04

● Spec. density 1.718 g/cm³ (25 ℃) ● Melting point 220 – 230 ℃

● IMDG NO Dangerous Good ● HS Code 2918 30 00
● RTECS UA2512000

Product No.	Packing	Price(₩)
5206	25g	42,000

Sodium Salicylate — Extra Pure



살리실산나트륨, Salicylic acid sodium salt
● CAS No. 54-21-7 ● EC No. 200198-0
● HOC_6H_4COONa ● FW 134.00

● Spec. density 0.32 g/cm³ (20℃) ● Solub. in H_2O 1000 g/ℓ (20℃) ● pH value 6.5 (100g/ℓ, H_2O, 25℃) ● Melting point 200℃ ● Bulk density 320 kg/m³

● HS Code 2918 21 00 ● RTECS VO5075000 9

Appearance ····· White crystalline powder.
Assay ····· Min 99.5%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
pH (5%, 25℃) ····· 6.0 ~ 8.5
Chloride (Cl) ····· Max 0.002
Sulfate (SO_4) ····· Max 0.01
Heavy metals (as Pb) ····· Max 0.001
Iron (Fe) ····· Max 0.001
Water ····· Max 0.2

Product No.	Packing	Price(₩)
4022	500g	18,000
4023	1kg	33,000

Sodium Selenite — Extra Pure

아셀렌산나트륨
● CAS No. 10102-18-8 ● Na_2SeO_3 ● FW 172.94

● IMDG UN 2630 SELENATES or SELENITES, 6.1, I

Appearance ····· White crystalline powder.
Assay ····· Min 90.0%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.01%
Nitrate (NO_3) ····· To pass test
Carbonate (CO_3) ····· To pass test

Product No.	Packing	Price(₩)
1497	25g	9,800
1498	500g	127,500

Sodium Silicate powder — Extra Pure

규산나트륨
● CAS No. 1344-09-8 ● $Na_2Si_3O_7$ ● FW 242.22

● IMDG UN 1759 CORROSIVE SOLID, N.O.S., 8, I

Appearance ····· White to green colored crystal or crystalline powder.
Water insoluble metter ····· Max 0.1
Iron (Fe) ····· Max 0.025%
Silicon dioxide ····· To pass test
Sodium dioxide ····· To pass test

Product No.	Packing	Price(₩)
297	500g	5,600
2502	20kg	105,000

S

Sodium Silicate Solution — CP

규산나트륨용액(물유리), Water glass
● CAS No. 1344-09-8 ● $Na_2Si_3O_7$ ● FW 242.22

● Spec. density ~ 1.35g/cm³ (20℃) ● Solub. in H_2O (20℃) soluble ● pH value 11.0 – 11.5 (50g/l, H_2O, 20℃) ● Melting point 0℃ ● Boliing Point > 100℃

● IMDG No Dangerous Good ● HS Code 2839 19 00 ● Merck Index 10, 8521

Appearance ····· Highly viscous liquid, no odor.
Silicon dioxide ····· 28.0 ~ 38.0
Sodium dioxide ····· 9.0 ~ 19.0

Product No.	Packing	Price(₩)
290	500g	4,400
2503	20kg	125,000

Sodium Silicofluoride — Extra Pure

헥사플루오르 규산나트륨, 규불화나트륨, Sodium Hexafluoro Silicate
● CAS No. 16893-85-9 ● $Na_2[SiF_6]$ ● FW 188.06

● Spec. density 1 g/cm³ (20℃) ● Solub. in H_2O 40 mg/ℓ (20℃) ● Melting point 500℃ (Decomposition)

● IMDG UN2674 SODIUM FLUOROSILICATE, 6.1, III

Appearance ····· White powder.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
Free acid (H_2SiF_4) ····· Max 1.0%
Chloride(Cl) ····· Max 0.05%
sulfate (SO_4) ····· Max 0.05%
Heavy metals (Pb) ····· Max 0.01%
Iron (Fe) ····· Max 0.01%

Product No.	Packing	Price(₩)
285	500g	5,300

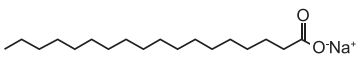
Sodium Stannate trihydrate — CP

석산나트륨, Sodium Hexahydroxostannate
● CAS No. 12058-66-1 ● $Na_2SnO_3 \cdot 3H_2O$ ● FW 266.71

Appearance ····· White to brown colored crystal.
Solubility in water ····· To pass test
Iron(Fe) ····· Max. 0.005%
Assay(Sn) ····· Min. 35.0%

Product No.	Packing	Price(₩)
304	500g	37,500

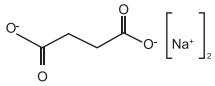
Sodium Stearate — CP



스테아린산나트륨, Sodium Octadecanoate
● CAS No. 822-16-2
● $CH_3(CH_2)_{16}COONa$ ● FW 306.46

Product No.	Packing	Price(₩)
1729	500g	9,800

Sodium Succinate hexahydrate — Extra Pure



호박산나트륨, Disodium Succinate hexahydrate
● CAS No. 6106-21-4 ● EC No. 205-778-7
● $Na_2C_4H_4O_4 \cdot 6H_2O$ ● FW 270.13

● Solub. in H_2O 349 g/l (20℃) ● pH value 6.0 – 8.5 (50g/l, H_2O, 20℃) ● Melting point 120℃ (release of crystalline water)

● IMDG No Dangerous Good ● HS Code 2917 19 90
● Merck Index 10, 8524

Appearance ····· Colorless to white crystal or crystalline powder.
Assay (after dry) ····· Min 98.0%
pH (5%) ····· 7.0 ~ 9.0
Sulfate (SO_4) ····· Max 0.0196%
Arsenic (As) ····· Max 0.0004%
Heavy metals (asPb) ····· Max 0.002%
Oxidizable substances ····· Red color for 3 min.
Drying loss (120℃, 2hr.) ····· 37.0 ~ 41.0%

Product No.	Packing	Price(₩)
3017	500g	8,800
307	1kg	13,800

Sodium Sulfate anhydrous

황산나트륨, 무수
● CAS No. 7757-82-6 ● EC No. 231-820-9 ● Na_2SO_4 ● FW 142.04

● Spec. density 2.70g/cm³ (20℃) ● Solub. in H_2O 200g/l (20℃) ● pH value 5.2 – 80(50g/l, H_2O, 25℃) ● Melting point 888℃ ● Bulk density ~ 1400 – 1600 kg/m³

● IMDG No Dangerous Good ● HS Code 2833 11 00
● RTECS WE1650000 ● Merck Index 10, 8526

Sodium Sulfate anhydrous — Extra Pure

Appearance ····· Colorless to white crystal or powder, highly hygroscopic.
Assay (after ignition) ····· Min 99.0%
Solubility in water ····· To pass test
Ethyl alcohol-soluble matter ····· Max 0.05%
Loss on Ignition ····· Max 0.5%
pH (5 w/v %, 25℃) ····· 5.0 ~ 8.0
Chloride (Cl) ····· Max 0.005%
Phosphate (PO4) ····· Max 0.005%
Calcium(Ca) ····· Max 0.005%
Lead (Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
310	500g	3,800
311	1kg	6,900
312	25kg	75,000

Sodium Sulfate anhydrous — PESTICIDE

Extraction-Concentration Suitability
Extraction-Concentration Suitability ····· To pass test
Assay (Na_2SO_4) ····· Min 99.0%
Calcium (Ca) ····· Max 0.01%
Chloride (Cl) ····· Max 0.001%
Heavy Metals (Pb) ····· Max 5 ppm
Insoluble metters ····· Max 0.01%
Iron (Fe) ····· Max 0.001%
Loss on Ignition ····· Max 0.5%
Magnesium (Mg) ····· Max 0.001%
Nitrogen Compounds (as N) ····· Max 5 ppm
pH of a 5% Solution at 25℃ ····· 5.2 ~ 9.2
Phosphate (PO_4) ····· Max 0.001%
Potassium (K) ····· Max 0.01%

Product No.	Packing	Price(₩)
315	500g	8,800

Sodium Sulfate decahydrate — Extra Pure

황산나트륨(망초)
● CAS No. 7727-73- 3 ● EC No. 231-820-9
● $Na_2SO_4 \cdot 10H_2O$ ● 322.19

● Spec. density 1.464 g/cm³ (20℃) ● Solub. in H_2O 420 g/ℓ (20℃) ● pH value 5~7.5 (100g/ℓ, H2O, 20℃)(anhydrous substance) ● Melting point 32.4℃

● HS Code 2833 11 00

Appearance ····· Colorless crystal, efflorescence in the air.
Assay ····· Min 98.0%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 5.0 ~ 8.0
Chloride (Cl) ····· Max 0.003%
Phosphate (PO_4) ····· Max 0.005%
Calcium(Ca) ····· Max 0.005%
Lead (Pb) ····· Max 0.001%
Iron(Fe) ····· Max 6ppm

Product No.	Packing	Price(₩)
316	500g	7,000
317	1kg	9,800
2509	25kg	Call

Sodium Sulfide hydrate

황화나트륨
● CAS No. 27610-45-3 ● $Na_2S \cdot nH_2O$ ● FW 78.04

Sodium Sulfide hydrate — Extra Pure

Product No.	Packing	Price(₩)
5482	1kg	16,300

Sodium Sulfide hydrate — CP

Product No.	Packing	Price(₩)
318	500g	7,000

Sodium Sulfite anhydrous — Extra Pure

아황산나트륨, 무수
● CAS No. 7757-83-7 ● EC No. 231-821-4
● Na_2SO_3 ● FW 126.14

● Spec. density 2.63g/cm³ (20℃) ● Solub. in H_2O 220 g/l (20℃) ● pH value 8.8 – 10 (50g/l, H_2O, 20℃) ● Melting point > 500℃ (decomposition)

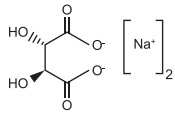
● IMDG No Danderous Good ● HS Code 2832 10 00
● Merck Index 10, 8528

Appearance ····· Colorless to white colored glassy lump or white powder.
Appearance ····· White crystalline powder.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
pH(5%) ····· 9.0 ~ 11.0
Chloride (Cl) ····· Max 0.05%
Lead (Pb) ····· Max 0.005%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
320	500g	4,400
321	1kg	7,000
322	25kg	75,000

di-Sodium tartrate dihydrate → *go to Sodium Tartrate dihydrate*

Sodium Tartrate dihydrate — Extra Pure



주석산나트륨, di-Sodium Tartrate dihydrate
● CAS No. 6106-24-7 ● EC No. 212-773-3
● $NaO_2CCH(OH)CH(OH)COONa \cdot 2H_2O$ ● FW 230.08

● Spec. density 1.82g/cm³ ● Solub. in H_2O 290 g/l (20℃) ● pH value ~8 (50g/l, H_2O, 25℃) ● Melting point 57℃ ● Bulk density ~ 460kg/m³

● IMDG No Dangerous Good ● HS Code 2918 13 00
● Merck Index 10, 8530

Appearance ····· Colorless crystal or crystalline powder.
Assay ····· Min 98.5%
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 7.0 ~ 9.0
Chloride (Cl) ····· Max 0.005%
Sulfur compound (asSO_4) ····· Max 0.02
Heavy metals (as Pb) ····· Max 0.002%
Iron (Fe) ····· Max 0.002%
Ammonium (NH_4) ····· Max 0.005%

Product No.	Packing	Price(₩)
326	500g	13,800
2513	25kg	187,500

Sodium tetraborate → *go to Borax*

Sodium tetrahydroborate → *go to Sodium Borohydride*

Sodium thiocyanate — Extra Pure / AR

NEW

티오시안산나트륨, Sodium Sulfocyanide
● CAS No. 540-72-7 ● EC No. 207-757-4
● NaSCN ● FW 81.07

● Vapor pressure <1hPa (20℃) ● Spec. density 1.74 g/cm³ (20℃) ● Solub. in H_2O 1200 g/ℓ (20℃) ● pH value 6~8 (100g/ℓ, H_2O, 25℃) ● Melting point 310℃

● HS Code 2842 90 80 ● RTECS XL2275000

Appearance ····· Deliquescent colorless crystals.
Assay (Dride) ····· Min 98.0%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Loss on drying (at 105℃) ····· Max 3.0%
Chloride (Cl) ····· Max 0.04%
Sulfate (SO_4) ····· Max 0.02%
Iron (Fe) ····· Max 5 ppm
Ammonium (NH_4) ····· Max 0.05%
Iodine-consuming substances (as S) ····· Max 0.03%

Product No.	Packing	Price(₩)
4039	500g	21,000
5207	1kg	33,000

N/10 - Sodium Thiocyanate (0.1M) — Normal

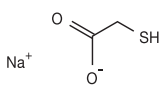
N/10(0.1M)싸이오시안산나트륨

Product No.	Packing	Price(₩)
404	500㎖	11,300

S

NEW

Sodium Thioglycollate 80% — Extra Pure



티오글리콜산나트륨
● CAS No. 367-51-1 ● EC No. 206-696-4
● $C_2H_3NaO_2S$ ● FW 114.1

● Solub. in H_2O 1000 g/l (20 ℃) ● Melting point 〉300℃ ● pH value 6 (100 g/l, H_2O, 20 ℃) ● Bulk density ~ 200 kg/m³

● HS Code 2838 00 30 ● RTECS SJ3325000 ● Merck Index 10, 7115

Product No.	Packing	Price(₩)
5208	25g	22,500

Sodium Thiosulfate anhydrous — Extra Pure

싸이오황산나트륨, 무수, Antichlor
● CAS No. 7772-98-7 ● EC No. 231-867-5 ● $Na_2S_2O_3$ ● FW 158.10

● Spec. density 1.67g/cm³ (20℃) ● Solub. in H_2O 701g/l (20℃) ● pH value 6.0 – 8.5(50g/l, H_2O, 20℃) ● Bulk density ~ 1350kg/m³

● IMDG No Dangerous Good ● HS Code 2832 30 00

Appearance ····· White crystalline powder.
Assay ····· Min 95.0%
Sulfate, Sulfite (as SO_4) ····· Max 0.4%
Sulfide(S) ····· Max 0.003%
Magnesium(Mg) ····· Max 0.002%
Calcium(Ca) ····· Max 0.004%

Product No.	Packing	Price(₩)
439	500g	6,800

Sodium Thiosulfate pentahydrate — Extra Pure

싸이오황산나트륨(하이포), Antichlor
● CAS No. 10102-17-7 ● EC No. 231-867-5 ● $Na_2O_3S_2 \cdot 5H_2O$ ● FW 248.19

● Spec. density 1.74g/cm³ (20℃) ● Solub. in H_2O 701g/l (20℃) ● pH value 6.0 – 7.5 (100g/l, H_2O, 20℃) ● Melting point 48℃ ● Bulk density ~ 1000 kg/m³

● IMDG No Dangerous Good ● HS Code 2832 30 00
● RTECS WE6660000 ● Merck Index 10, 8542

Appearance ····· White crystal.
Assay ····· Min 98.5%
Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.005%
Sulfate, Sulfite (as SO_4) ····· Max 0.2%
Sulfide(S) ····· Max 0.001%
Lead(Pd) ····· Max 0.001%
Iron(Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
413	500g	4,400
415	1kg	7,500
2163	25kg	45,000

N/10 - Sodium Thiosulfate (0.1M) — Normal

N/10(0.1M)싸이오황산나트륨

Factor(at.20) ····· 1.000 ~ 1.005℃
Appearance ····· To pass test

Product No.	Packing	Price(₩)
453	500㎖	5,000
455	1ℓ	8,800

N/20 - Sodium Thiosulfate (0.05M) — Normal

N/20(0.05M)싸이오황산나트륨

Product No.	Packing	Price(₩)
447	500㎖	6,000

N/2 - Sodium Thiosulfate (0.5M) — Normal

N/2(0.5M)싸이오황산나트륨

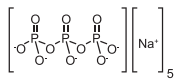
Product No.	Packing	Price(₩)
456	500㎖	6,000

N/40 - Sodium Thiosulfate (0.025M) — Normal

N/40(0.025M)싸이오황산나트륨

Product No.	Packing	Price(₩)
443	500㎖	5,300

Sodium Tripolyphosphate



트리폴리인산나트륨, Pentasodium triphosphate
● CAS No. 7758-29-4 ● EC No. 231-838-7
● $Na_5P_3O_{10}$ ● FW 367.85

● Vapour pressure < 0.1hPa (20℃) ● Spec. density 2.52g/cm³ (20℃) ● Solub. in H_2O 145g/l (25℃) ● pH value ~9.9 (10g/l, H_2O, 20℃) ● Melting point 622℃ (decomposition) ● Bulk density ~ 1000 kg/m³

Sodium Tripolyphosphate — Extra Pure

Appearance ····· Colorless to white colored glassy lump or white powder.
Assay (as P_2O_5) ····· 53.0 ~ 80.0%
Solubility in water ····· To pass test
Loss on drying (at.110℃, 4hr.) ····· Max 5.0%
Chloride (Cl) ····· Max 0.002%
Phosphate (PO_4) ····· To pass test
Carbonate (CO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.0245%
Heavy metals (as Pb) ····· Max 0.002%
Arsenic (As) ····· Max 2ppm

Product No.	Packing	Price(₩)
2519	500g	5,600
2517	25kg	110,300

Sodium Tripolyphosphate — CP

Product No.	Packing	Price(₩)
851	500g	5,600

S

Sodium Tungstate dihydrate — Extra Pure

텅스텐산나트륨

● CAS No. 10213-10-2 ● EC No. 236-743-4 ● $Na_2WO_4 \cdot 2H_2O$ ● FW 329.87

● Spec. density 3.23g/cm³ (20℃) ● Solub. in H_2O 730g/l (20℃) ● pH value 8 – 9 (50g/l, H_2O, 20℃) ● Melting point 698℃ (anhydrous substance) ● Bulk density ~ 1600kg/m³

● IMDG No Dangerous Good ● HS Code 2841 80 00
● Merck Index 10, 8545

Appearance ····· Colorless crystal or white crystalline powder.
Assay(WO_3) ····· Min 68.0%
Solubility in water ····· To pass test
pH(5%) ····· 8.0 ~ 10.0
Chloride(Cl) ····· Max 0.02%
Sulfate(SO_4) ····· Max 0.05%
Heavy metals & Iron ····· To pass test

Product No.	Packing	Price(₩)
461	500g	80,000
2521	20kg	Call

Sodium L-ascorbate → *go to L-Ascorbic Aicd Sodium Salt*

Sorbic acid potassium salt → *go to Potassium Sorbate*

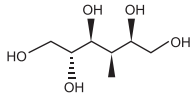
Sorbitan monolaurate → *go to Span 20*

Sorbitan monooleate → *go to Span 80*

Sorbitan monopalmitate → *go to Span 40*

Sorbitan monostearate → *go to Span 60*

D-Sorbitol — Extra Pure



솔비톨

● CAS No. 50-70-4 ● EC No. 200-061-5
● $C_6H_{14}O_6$ ● FW 182.17

● Spec. density 1.49g/cm³ (20℃) ● Explosive limit > 30g/m³ ● Flash point > 100℃ ● Solub. in H_2O 2350 g/l (25℃) ● pH value 6 – 7 (100g/l, H_2O, 20℃) ● Melting point 94 – 96℃ ● Boiling point 105℃ (1013hPa) ● Ignition temp. 420℃

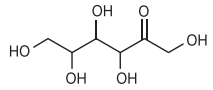
● IMDG No Danderous Good ● HS Code 2905 44 91 ● RTECS LZ4290000

Appearance ····· White granule or crystalline powder, sweet taste.
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.02%
Free acid ····· Max 0.008%
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.01%
Heavy Metals (as Pb) ····· Max 5ppm
Iron (Fe) ····· Max 0.001%
Nickel (Ni) ····· Max 0.001%
Barium (Ba) ····· To pass test
Arsenic (As) ····· Max 1ppm
Reducing sugars ····· Max 0.1%
Dextrine,starch & sulfite ····· To pass test

Product No.	Packing	Price(₩)
849	500g	7,500
850	20kg	112,500

L(-) Sorbose — Extra Pure

NEW



L-솔보즈

● CAS No. 87-79-6
● $C_6H_{12}O_6$ ● FW 180.16

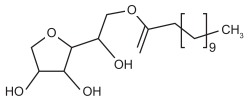
● IMDG NO Dangerous Good
● HS Code 2905 44 91 ● RTECS WG3195025
● Merck Index 14, 8726

Product No.	Packing	Price(₩)
5209	25g	75,000

Sonic Clean — Ultrasonic Cleaner

Product No.	Packing	Price(₩)
468	4 ℓ	30,000

Span 20 — CP



스판 20, Sorbitan monolaurate

● CAS No. 1338-39-2 ● EC No. 215-663-3
● $C_{18}H_{34}O_6$ ● FW 346.47

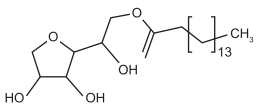
● Vapour pressure < 1.3hPa(20℃) ● Spec. density 1.0 g/cm³(20℃) ● Flash point > 149℃ ● Boiling point > 100℃

● IMDG No Dangerous Good ● HS Code 2932 19 00 ● RTECS WG2920000

Apperance ····· Yellow to brown colored liquid.
Acid value ····· 4.0 ~ 7.0 KOH mg/g
Hydroxyl value ····· 330 ~ 350 KOH mg/g
Water ····· Max 1.0%

Product No.	Packing	Price(₩)
496	500g	9,800

Span 40 — CP



스판 40, Sorbitan monopalmitate

● CAS No. 26266-57-9 ● EC No. 247-568-8
● $C_{22}H_{42}O_6$ ● FW 402.64

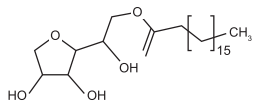
● Vapour pressure < 1.4hPa(20℃) ● Spec. density 1.0 g/cm³(20℃) ● Flash point > 149℃ ● Solub. in H_2O (20℃) insoluble ● Boiling point > 100℃

● IMDG No Dangerous Good ● HS Code 2932 19 00

Product No.	Packing	Price(₩)
493	500g	9,800

S

Span 60 CP



스판 60, Sorbitan monostearate
● CAS No. 1338-41-6 ● EC No. 215-664-9
● $C_{24}H_{46}O_6$ ● FW 430.70

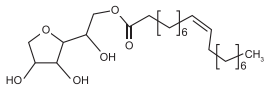
● Vapour pressure < 1.4hPa(20℃) ● Flash point > 149℃ ● Solub. in H_2O (20℃) insoluble ● Melting point 53℃ ● Boiling point > 100℃

● IMDG No Dangerous Good ● HS Code 2932 19 00

Apperance ····· White to pale yellow colored grain.
Acid value ····· 5.0 ~ 10.0mg KOH mg/g
Hydroxyl value ····· 235.0 ~ 260.0mg KOH mg/g
Water ····· Max 1.5%
Residue after ignition ····· Max 1.0%

Product No.	Packing	Price(₩)
491	500g	9,800

Span 80 CP



스판 80, Sorbitan monooleate
● CAS No. 1338-43-8 ● EC No. 215-665-4
● $C_{24}H_{44}O_6$ ● FW 428.68

● Vapour pressure < 1.4hPa(20℃) ● Spec. density 1.0 g/cm³(20℃) ● Flash point > 149℃ ● Solub. in H_2O (20℃) insoluble ● Boiling point > 100℃

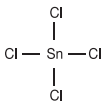
● IMDG No Dangerous Good ● HS Code 2932 19 00

Acid value ····· Max 8 KOH mg/g
Hydroxyl value ····· 193 ~ 210 KOH mg/g
Saponification value ····· 145 ~160 KOH mg/g
Water ····· Max 1.0%

Product No.	Packing	Price(₩)
489	500g	9,800

NEW

Stannic Chloride Anhydrous Extra Pure



염화제이주석, Tin(IV) chloride anhydrous
● CAS No. 7646-78-8 ● EC No. 231-588-9
● Cl_4Sn ● FW 260.5

● Vapor pressure 31 hPa (20 ℃) ● Spec. density 2.26 g/cm³ (20 ℃) ● Solub. in H_2O (20 ℃) (rigorous de-composition) ● pH value 0.2 (60 g/l, H_2O, 20 ℃) Hy-drolysis ● Melting point −33 ℃ ● Boiling point 114 ℃

● IMDG UN 1827 STANNIC CHLORIDE, ANHYDROUS, 8, II ● HS Code 2827 39 10

Product No.	Packing	Price(₩)
519	500g	37,500
524	1kg	84,000

Stannic Oxide CP

산화제이석, Tin(IV) oxide, Tin dioxide
● CAS No. 18282-10-5 ● EC No. 242-159-0 ● SnO_2 ● FW 150.69

● Spec. density 6.95g/cm³(20℃) ● Solub. in H_2O (20℃) almost insoluble ● pH value 4 – 5 (50g/l, H_2O, 20℃)(slurry) ● Melting point 1630℃ ● Bulk density 500 –600kg/m³ ● Boiling point 1800 – 1900℃ (sublimed)

● IMDG No Dangerous Good ● HS Code 2825 90 30
● RTECS XQ4000000 ● Merck Index 10, 8629

Appearance ····· White to pale yellow colored ointment-like material.
Assay ····· Min 99.0%
Fe_2O_3 ····· Max 0.05%
Heavy metals (as Pb) ····· Max 0.05%
Arsenic (As) ····· Max 0.05%
Ignition loss ····· Max 1.0%

Product No.	Packing	Price(₩)
275	500g	65,000

Stannous Chloride dihydrate Extra Pure

염화제일석, Tin dichloride, dihydrate, Tin(II) chloride dihydrate
● CAS No. 10025-69-1 ● EC No. 231-868-0 ● $SnCl_2 \cdot 2H_2O$ ● FW 225.63

● Spec. density 2.71g/cm³ (20℃) ● Solub. in H_2O 1187g/l (20℃) almost insoluble ● pH value ~ 1 – 2 (100g/l, H_2O, 20℃) ● Melting point 38℃ ● Bulk density ~ 1250kg/m³ ● Boiling point 623℃ (1013hPa) (anhydrous substance)

● IMDG No Dangerous Good ● HS Code 2827 39 10
● RTECS XP8850000 ● Merck Index 10, 8635

Appearance ····· Colorless to white crystal.
Assay ····· Min. 90.0%
Solubility in HCl ····· To pass test
Sulfate (SO_4) ····· Max 0.01%
Lead (Pb) ····· Max 0.006%
Iron (Fe) ····· Max 0.005%
Arsenic (As) ····· Max 2ppm

Product No.	Packing	Price(₩)
532	500g	37,500

Stannous pyrophosphate → *go to Tin Pyrophosphate*

Stannous Sulfate Extra Pure

황산제일석, Tin(II) sulfate
● CAS No. 7488-55-3 ● EC No. 231-302-2 ● $SnSO_4$ ● FW 214.77

● Solub. in H_2O (20℃) insoluble ● pH value ~ 1.6 (50g/l, H_2O, 20℃) ● Bulk density ~ 740kg/m³

● IMDG No Dangerous Good ● HS Code 2833 29 90 ● Merck Index 10, 8643

Assay ····· Min 95.0%
Solubility in water ····· To pass test
Heavy metals (as Pb) ····· Max 0.006%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
531	500g	37,500

Starch Corn

옥수수전분
● CAS No. 9005-25-8 ● EC No. 232-679-6 ● $(C_6H_{10}O_5)n$

Starch Corn Extra Pure

Appearance ····· White to pale yellowish white lump or powder.
Loss on drying(at.105 ℃, 2hr.) ····· Max 18.0%
Ignition residue (as Sulfate) ····· Max 0.5%
Iron (Fe) ····· Max 0.003%
Sensitiveness ····· To pass test

Product No.	Packing	Price(₩)
844	500g	5,600
2530	20kg	62,500

Starch Corn KP

성상 ····· 흰색~엷은 황백색의 덩어리 또는 가루

확인시험 ····· 편광현미경 시험 확인 1g을 물 50ml에 넣어 1 분간 끓여 식힐 때 엷은 흰색의 혼탁한 이상의 액이 된다. 액에 희석시킨 요오드시액(1→10)을 넣을 때 등적색~어두운 청자색을 나타내고 가열하면 없어진다.
pH ····· 4.0 ~ 7.0
철 ····· Max 10ppm
산화성물질 (0.002mol/L 티오황산나트륨액) ····· 1.4ml 이하
이산화황 장치 ····· Max 50ppm
이물 ····· 현미경 확인
건조감량(1g,130℃,90분) ····· Max. 15.0 (1g)
강열잔분(1g) ····· Max 0.6%
미생물 한도 시험
세균수 ····· Max 1000cfu/g
진균 ····· Max 100cfu/g
특정미생물 ····· 대장균,살모넬라,녹농균 및 황색포도상구균 검출되지 않아야 된다.

Product No.	Packing	Price(₩)
845	20kg	62,500

Starch, Potato CP

감자전분
● CAS No. 9005-25-8

Product No.	Packing	Price(₩)
843	500g	7,500

Starch, Soluble Extra Pure

전분, 용성, Amylum, Potato starch for determination of diastase
● CAS No. 9005-84-9 ● EC No. 232-686-4 ● $(C_6H_{10}O_5)n$

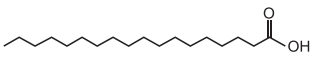
● Solub. in H_2O 50g/l (90℃) ● pH value 6.0 ~ 7.5 (20g/l, H_2O, 25℃) ● Bulk density ~ 300kg/m³

● IMDG No Dangerous Good ● HS Code 3505 10 90 ● Merck Index 10, 8651

solubility in water ····· To pass test
pH(2%) ····· 4.5 ~ 7.0
Ignition residue (as Sulfate) ····· Max. 2.0%
Iron (Fe) ····· Max. 0.006%
Sensitiveness ····· To pass test

Product No.	Packing	Price(₩)
841	500g	15,000

Stearic acid Extra Pure



스테아린산, Octadecanoic acid
● CAS No. 57-11-4 ● EC No. 200-313-4
● $CH_3(CH_2)_{16}COOH$ ● FW 284.47

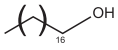
● Flash point 196℃ c.c. ● Solub. in H_2O (20℃) insoluble ● Melting point 68 - 70℃
● Bulk density ~ 400 - 500kg/m³ ● Boiling point 370℃ ● Ignition temp. 395℃

● IMDG No Dangerous Good ● HS Code 2915 70 25
● RTECS WI2800000 ● Merck Index 10, 8654

Appearance ····· White crystalline powder.
Assay ····· Min. 95.0%
Melting point ····· 64.0 ~ 71.0℃
Ignition residue (as Sulfate) ····· Max 0.1%
Acid value ····· 195 ~ 200
Iodine value ····· Max 1.5

Product No.	Packing	Price(₩)
847	500g	6,300
2537	15kg	125,000

Stearyl Alcohol CP



스테아릴알콜, 1-Octadecanol, Octadecyl alcohol
● CAS No. 112-92-5 ● EC No. 204-017-6
● $CH_3(CH_2)_{16}CH_2OH$ ● FW 270.50

● Vapour pressure < 1hPa (20℃) ● Spec. density 0.805 - 0.815 g/cm³(60℃) ● Flash point ~ 195℃ c.c.
● Solub. in H_2O (20℃) almost insoluble ● Melting point 55 - 60℃ ● Bulk density 300kg/m³ ● Boiling point 330 - 360℃ ● Ignition temp. 230℃ (DIN 51794)

● IMDG No Dangerous Good ● HS Code 2905 17 00
● RTECS RG2010000 ● Merck Index 10, 8655

Product No.	Packing	Price(₩)
3492	500g	9,400

Strontium Carbonate CP

탄산스트론튬, Carbonic acid strontium salt
● CAS No. 1633-05-2 ● EC No. 216-643-7 ● $SrCO_3$ ● FW 147.63

● Spec. density 3.74g/cm³ (20℃) ● Solub. in H_2O 0.01g/l (20℃) ● pH value 7 - 8 (0.01g/l, H_2O, 20℃) ● Melting point 1497℃ ● Bulk density ~ 750kg/m³

● IMDG No Dangerous Good ● HS Code 2836 92 00

Product No.	Packing	Price(₩)
3492	500g	9,400

Strontium Chloride hexahydrate Extra Pure

염화스트론튬
● CAS No. 10025-70-4 ● EC No. 233-971-6 ● $SrCl_2 \cdot 6H_2O$ ● FW 266.62

● Spec. density 1.95g/cm³ (20℃) ● Solub. in H_2O 1062 g/l (0℃) ● pH value 5 - 7 (50g/l, H_2O, 25℃) ● Melting point ~ 61℃ ● Bulk density ~ 1050kg/m³

● IMDG No Dangerous Good ● HS Code 2827 39 85
● RTECS WK8575000 ● Merck Index 10, 8705

Appearance ····· White crystal or crystalline powder.
Solubility in water ····· To pass test
pH (5 w/v %, 25℃) ····· 5.0 ~ 7.0
Sulfate (SO_4) ····· Max. 0.01%
Heavy metals (as Pb) ····· Max. 0.002%
Iron (Fe) ····· Max. 0.002%
Nitrate ····· To pass test
Barium ····· To pass test
Assay ····· Min. 98.0%

Product No.	Packing	Price(₩)
273	500g	11,300

Strontium Hydroxide Octahydrate Extra Pure NEW

수산화스트론튬 8수화물, Strontium dihydroxide
● CAS No. 1311-10-0
● $Sr(OH)_2 \cdot 8H_2O$ ● FW 265.76

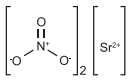
● Spec. density 1.9 g/cm³

● IUN 3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (STRONTIUM HYDROXIDE), 8, II ● HS Code 2816 40 00

Product No.	Packing	Price(₩)
5210	500g	12,300

S

Strontium Nitrate — Extra Pure



질산스트론튬
● CAS No. 10042-76-9 ● EC No. 233-131-9
● $Sr(NO_3)_2$ ● FW 211.64

● Spec. density 2.986g/cm³ (20℃) ● Solub. in H_2O 660 g/l (20℃) ● pH value ~ 5 - 7 (50g/l, H_2O, 20℃) ● Melting point 570℃ ● Bulk density ~ 1000kg/m³ ● Boiling point 645℃

● IMDG UN 1507 STRONTIUM NITRATE, 5.1, III ● HS Code 2834 29 80
● 1류 경산염류 300kg ● Merck Index 10, 8712

Appearance	White crystal or powder.
Assay	Min 97.0%
Solubility in water	To pass test
pH (5 w/v %, 25℃)	5.0 ~ 7.0
Chloride (Cl)	Max 0.005%
Sulfate (SO_4)	Max 0.01%
Heavy metals (as Pb)	Max 0.001%
Calcium(Ca)	Max 0.1%
Iron (Fe)	Max 0.002%

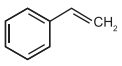
Product No.	Packing	Price(₩)
272	500g	10,000

Strontium Sulfate — Extra Pure

황산스트론튬
● CAS No. 7759-02-6 ● $SrSO_4$ ● FW 183.68

Product No.	Packing	Price(₩)
2538	500g	12,500

Styrene Monomer — Extra Pure



스티렌모노머, Phenylenthylene, Vinylbenzene
● CAS No. 100-42-5 ● EC No. 202-851-5
● $C_6H_5CH=CH_2$ ● FW 104.15

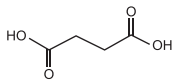
● Vapour pressure 6hPa (20℃) ● Spec. density 0.906 g/cm³ (20℃) ● Explosive limit 1.1 - 8.9 Vol% ● Flash point 31℃ c.c. ● Solub. in H_2O 0.24g/l (20℃) ● Saturation conc. 25.6g/m³ ● Melting point -31℃ ● Boiling point 145℃ ● Ignition temp. 480℃

● IMDG UN 2055 STYRENE MONOMER, STABILIZED, 3, III
● HS Code 2902 50 00 ● RTECS WL3675000
● 4류 제2석유류(비수용성액체) 1000ℓ ● Merck Index 10, 8732

Appearance	Colorless to yellow colored liquid, characteristic odor.
Assay (by GC)	Min 99.5%
Solubility in ethanol	To pass test
Density (20℃)	0.906 ~ 0.908g/ml
Refractive index (n 20 D)	1.546 ~ 1.548

Product No.	Packing	Price(₩)
268	500mℓ	5,000
269	1 ℓ	8,800
270	18 ℓ	84,400

Succinic Acid — Extra Pure



호박산, Butanedioic acid
● CAS No. 110-15-6 ● EC No. 203-740-4
● $HOOCCH_2CH_2COOH$ ● FW 118.09

● Spec. density 1.56g/cm³ (20℃) ● Explosive limit 200 - 1000c/m³ ● Flash point 206℃. ● Solub. in H_2O 58 g/l (20℃) ● pH value 2.7 (10g/l, H_2O, 20℃) ● Melting point 185 - 190℃ ● Bulk density 940kg/m³ ● Boiling point 235℃ ● Ignition temp. 470℃

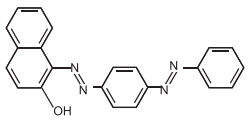
● IMDG No Dangerous Good ● HS Code 2917 19 90
● Merck Index 10, 8743

Appearance	White crystal or crystalline powder.
Assay	Min 99.0%
Solubility in water	To pass test
Ignition residue (as Sulfate)	Max 0.04%
Chloride (Cl)	Max 0.003%
Sulfate (SO_4)	Max 0.01%
Heavy metals (as Pb)	Max 0.002%
Iron (Fe)	Max 0.002%
Ammonium (NH_4)	Max 0.002%
Substances reducing permanganate	To pass test

Product No.	Packing	Price(₩)
267	500g	8,800

Sucrose → *go to Saccharose*

Sudan-III



수단, CI-26100
● CAS No. 85-86-9 ● EC No. 201-638-4
● $C_{22}H_{16}N_4O$ ● FW 352.39

● IMDG No Dangerous Good
● HS Code 3204 19 00

Sudan-III — GR

Product No.	Packing	Price(₩)
2812	25g	8,100

Sudan-III — Indicator

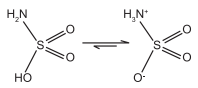
Product No.	Packing	Price(₩)
265	25g	8,100

Sudan-III Solution — Indicator solution

수단용액

Product No.	Packing	Price(₩)
264	500m ℓ	8,100

Sulfamic Acid GR



설파믹산, Amidosulfuric acid
● CAS No. 5329-14-6 ● EC No. 226-218-8
● H_2NSO_3H ● FW 97.09

● Vapour pressure 0.0078hPa (20℃) ● Spec. density 2.13g/cm³ (20℃) ● Solub. in H_2O 213 g/l (20℃) ● pH value 1.18 (10g/l, H_2O, 25℃) ● Melting point 205℃ (decomposition) ● Bulk density ~ 600kg/m³

● IMDG UN 2967 SULPHAMIC ACID, 8, III ● HS Code 2811 19 80
● RTECS WO5950000 ● Merck Index 10, 8793

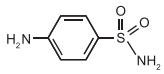
Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.5%
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.005%
Chloride (Cl) ····· Max 5ppm
Sulfate (SO_4) ····· Max 0.01%

Heavy Metals (as Pb) ····· Max 5ppm
Iron(Fe) ····· Max 5ppm

Product No.	Packing	Price(₩)
262	500g	6,900
4859	25kg	106,300

NEW

Sulfanilamide 98% Extra Pure



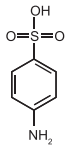
설파닐아마이드, 4-Aminobenzenesulfonamide
● CAS No. 63-74-1 ● EC No. 200-563-4
● $H_2NC_6H_4SO_2NH_2$ ● FW 172.20

● Spec. density 1.50 g/cm³ (20℃) ● Solub. in H_2O 7.5 g/ℓ (25℃) ● pH value 5.8~6.1 (5g/ℓ, H_2O, 20℃) ● Melting point 163~167 ℃

● HS Code 2935 00 90

Product No.	Packing	Price(₩)
4041	500g	36,000
4785	1kg	Call

Sulfanilic Acid



설파닐산, 4-Aminobenzenesulfonic acid
● CAS No. 121-57-3 ● EC No. 204-482-5
● $NH_2C_6H_4SO_3H$ ● FW 173.19

● Spec. density 1.485g/cm³ (25℃) ● Solub. in H_2O 10 g/l (20℃) ● pH value 2.5 (10g/l, H_2O, 20℃) ● Melting point 288℃ decomposes ● Bulk density ~ 620kg/m³ ● Ignition temp. > 400℃ (DIN 51794)

● IMDG No Dangerous Good ● HS Code 2921 42 10 ● Merck Index 10, 8801

Sulfanilic Acid Extra Pure

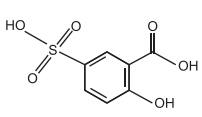
Product No.	Packing	Price(₩)
4599	500g	Call

Sulfanilic Acid CP

Product No.	Packing	Price(₩)
260	500g	18,000

Sulfomethane → *go to Methane Sulfonic Acid*

5-Sulfosalicylic Acid dihydrate GR



설포살리실산, Salicylsulfonic acid
● CAS No. 5965-83-3 ● EC No. 202-555-6
● $C_6H_3(OH)(SO_3H)COOH \cdot 2H_2O$ ● FW 254.22

● Spec. density 0.8g/cm³ (20℃) ● Flash point ~ 150℃ ● Solub. in H_2O (20℃) freely soluble ● pH value < 0.5 (200g/l, H_2O, 20℃) ● Melting point 105 – 109℃ (for the dihydrate) ● Bulk density ~ 310kg/m³

● IMDG UN 2585 ARYLSULPHONIC ACIDS, SOLID, 8, III ● HS Code 2918 29 10

Product No.	Packing	Price(₩)
258	25g	5,300
259	500g	36,000

Sulfur powder Extra Pure

유황
● CAS No. 7704-34-9 ● EC No. 231-722-6 ● S ● FW 32.05

● Vapour pressure < 0.01hPa (20℃) ● Spec. density 1.96 – 2.07 g/cm³ (20℃) ● Flash point 160℃ c.c. ● Solub. in H_2O (20℃) almost insoluble ● Melting point 113 – 119℃ ● Bulk density ~ 400 – 500kg/m³ ● Boiling point 444℃ ● Ignition temp. 235℃ (dust)

● IMDG UN 1350 SULPHUR, 4.1, III ● HS Code 2802 00 00
● 2류 유황 100kg ● Merck Index 10, 8849

Appearance ····· Pale yellow crystal or crystalline powder.
Assay ····· Min 98.0%
Solubility in CS_2 ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.3%
Acid (as H_2SO_4) ····· 0.02%
Chloride (Cl) ····· Max 0.003%
Sulfide(as Na_2S) ····· 0.005%
Arsenic (As) ····· Max 5ppm
Selenium (Se) ····· To pass test

Product No.	Packing	Price(₩)
256	500g	7,000
257	25kg	75,000

S

Sulfuric Acid 95%

황산

● CAS No. 7664-93-9 ● EC No. 231-639-5 ● H_2SO_4 ● FW 98.08

● Vapour pressure ~ 0.0001hPa (20℃) ● Spec. density 1.84g/cm³ (20℃) ● Solub. in H_2O (20℃) soluble (caution! development of heat) ● pH value 0.3 (49g/l, H_2O, 25℃) ● Melting point ~ 3℃ ● Boiling point ~ 335℃

● IMDG UN 1830 SULPHURIC ACID, 8, II ● HS Code 2807 00 10
● RTECS WS5600000

Sulfuric Acid 95% ACS

Appearance	Free from suspended or insoluble matter
Assay	95.0 ~ 98.0%
Color	Max 10 APHA
Residue after ignition	Max 5ppm
Chloride (Cl)	Max 0.2ppm
Nitrate (NO_3)	Max 0.5ppm
Ammonium (NH_4)	Max 2ppm
Substances reducing permanganate (as SO_2)	Max 2ppm
Arsenic (As)	Max 0.01ppm
Heavy metals (as Pb)	Max 1ppm
Iron (Fe)	Max 0.2ppm
Mercury (Hg)	Max 5ppb

Sulfuric Acid 95% EL

Assay (as H_2SO_4)	95.0 ~ 97.0%
Color	Max 10 APHA
Residue after ignition	Max 3ppm
Chloride (Cl)	Max 0.1ppm
Nitrate (NO_3)	Max 0.2ppm
Phosphate (PO_4)	Max 0.5ppm
Aluminum (Al)	Max 100ppb
Arsenic (As)	Max 5ppb
Barium (Ba)	Max 100ppb
Boron (B)	Max 10ppb
Cadmium (Cd)	Max 10ppb
Calcium (Ca)	Max 100ppb
Chromium (Cr)	Max 100ppb
Cobalt (Co)	Max 100ppb
Copper (Cu)	Max 10ppb
Gallium (Ga)	Max 50ppb
Germanium (Ge)	Max 100ppb
Gold (Au)	Max 10ppb
Iron (Fe)	Max 100ppb
Lead (Pb)	Max 100ppb
Lithium (Li)	Max 50ppb
Magnesium (Mg)	Max 50ppb
Manganese (Mn)	Max 100ppb
Nickel (Ni)	Max 100ppb
Potassium (K)	Max 100ppb
Silver (Ag)	Max 100ppb
Sodium (Na)	Max 100ppb
Strontium(Sr)	Max 100ppb
Antimony (Sn)	Max 100ppb
Zinc (Zn)	Max 100ppb
Particle Count (0.5 micron and above)	Max 100pcs/ml

Product No.	Packing	Price(₩)
2548	3.8ℓ	15,000
242	30kg	43,750

Sulfuric Acid 95% Extra Pure

Appearance	Colorless liquid, viscous.
Assay	Min 95.0%
Ignition residue (as Sulfate)	Max 0.002%
Chloride (Cl)	Max 8ppm
Nitrate	To pass test
Lead (Pb)	Max 5ppm
Arsenic (As)	Max 0.2ppm
Selenium (Se)	To pass test
Iron(Fe)	Max 2.5ppm
Substances reducing permanganate	To pass test

Product No.	Packing	Price(₩)
234	500g	2,500
235	1kg	4,400
3854	2.5ℓ	11,300
236	30kg	30,000
2550	350kg	Call

Sulfuric Acid 95% GR

Appearance	Colorless liquid, viscous.
Assay	Min 95.0%
Ignition residue (as Sulfate)	Max 5ppm
Chloride (Cl)	Max 0.2ppm
Nitrate (NO_3)	To pass test
Copper (Cu)	Max 0.1ppm
Lead (Pb)	Max 0.1ppm
Arsenic (As)	Max 0.02ppm
Selenium (Se)	Max 0.5ppm
Iron(Fe)	Max 0.5ppm
Ammonium (NH_4)	Max 1ppm
Substances reducing permanganate	To pass test

Product No.	Packing	Price(₩)
233	1kg	5,300
4605	2.5ℓ	7,800

Sulfuric Acid 15% Solution

황산 15%

Assay ..... 15.0 ~15.5%

Product No.	Packing	Price(₩)
243	500g	2,900

5N-Sulfuric Acid Normal

5N황산

Product No.	Packing	Price(₩)
4220	1ℓ	9,800

2N-Sulfuric Acid (1M) Normal

2N(1M)황산

Product No.	Packing	Price(₩)
253	500㎖	8,800

1N-Sulfuric Acid (0.5M) Normal

1N(0.5M)황산

● Spec. density 1.03g/cm³ (20℃) ● Solub. in H_2O (20℃) soluble ● pH value ~0.6 (20℃)

● IMDG UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC,N.O.S. (SULPHURIC ACID SOLUTION), 8, III ● HS Code 2807 00 10

Appearance	To pass test
Factor (at 20℃)	1.000 ~ 1.005

Product No.	Packing	Price(₩)
254	500㎖	5,300
255	1 ℓ	8,800

N/2-Sulfuric Acid (0.25M) Normal

N/2(0.25M)황산

● Spec. density 1.02g/cm³(20℃) ● Solub. in H_2O(20℃) soluble ● pH value ~1.0 (20℃)

● IMDG UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC,N.O.S. (SULPHURIC ACID SOLUTION), 8, III ● HS Code 2807 00 10

Product No.	Packing	Price(₩)
248	500㎖	5,000

N/5-Sulfuric Acid (0.1M) Normal

N/5(0.1M)황산

Product No.	Packing	Price(₩)
244	500㎖	5,000
245	1 ℓ	9,400

N/10-Sulfuric Acid (0.05M) Normal

N/10(0.05M)황산

● Spec. density 1.00g/cm³(20℃) ● Solub. in H_2O(20℃) soluble ● pH value ~1.3 (20℃)

● IMDG UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC,N.O.S. (SULPHURIC ACID SOLUTION), 8, III ● HS Code 2807 00 10

Appearance ····· To pass test
Factor (at 20) ····· Max 1.005℃

Product No.	Packing	Price(₩)
250	500㎖	5,000
251	1 ℓ	8,800

N/20-Sulfuric Acid(0.025M) Normal

N/20(0.025M)황산

Product No.	Packing	Price(₩)
249	500㎖	5,000
2547	1 ℓ	8,800

N/40-Sulfuric Acid(0.0125M) Normal

N/40(0.0125M)황산

Product No.	Packing	Price(₩)
247	500㎖	5,300

N/50-Sulfuric Acid(0.01M) Normal

N/50(0.01M)황산

Product No.	Packing	Price(₩)
246	500㎖	5,500

N/100-Sulfuric Acid(0.005M) Normal

N/100(0.005M)황산

Product No.	Packing	Price(₩)
252	500㎖	5,000

Sulfuric Acid diluted pH4 Solution

pH4 황산용액

Product No.	Packing	Price(₩)
3443	500㎖	3,900

S

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

T

Alphabetical list Numbers

List of T

Product	Page
Tannic Acid	275
DL–Tartaric Acid	275
L(+)–Tartaric Acid	275
TDI	275
1,1,2,2–Tetrachloroethane	275
Tetrachloroethylene	275
Tetradecanoic acid	275
Tetraethyl o–silicate	275
Tetrahydrofuran	275
Tetrahydrofuran Stabilized with 250ppm BHT	276
Tetrahydro–1,4–oxazine	276
Tetramethyl Ammonium Chloride	276
Tetramethylammonium Hydroxide 20%	276
Tetrazolium Salt	277
THAM	277
THF	277
Thiamine hydrochloride	277
Thiazole Yellow G	277
Thioacetamide	277
Thiourea	277
L–Threonine for Biochemistry	277
Thymol	277
Thymol Blue	278
Thymol Blue Solution 0.1%	278
Thymolphthalein Solution 0.1%	278
Thymolsulfophthalein	278
Tin dichloride	278
Tin(Ⅱ) diphosphate	278
Tin(Ⅳ) oxide	278
Tin Powder	278
Tin(Ⅱ) Pyrophosphate	278
Tin(Ⅱ) sulfate	278
Titan Yellow	278
Titanium Dioxide	278
Titanium Powder	278
Titanium(Ⅳ) oxide	279
TMAH 20%	279
o–Tolidine Solution	279
Toluene	279
Toluene 2,4–Diisocyanate	280
p–Toluene Sulfonic Acid	280
4–Toluenesulfonyl Chloride	280
p–Toluenesulfonyl Chloride	280
Toluidine Blue	280
Tosylchloramide sodium	280
Tragacanth Powder	280
Tributylamine	280
Tributyl phosphate	281
Trichloroacetic Acid	281

Product	Page
1,2,4–Trichlorobenzene	281
Trichloro Ethylene	281
1,1,1–Trichloroethane	282
Trichloromethane	282
Triethanolamine	282
TriethylAmine	282
Triethyl Phosphate	282
Triethyl Phosphite	283
Triethylene diamine	283
Triethylene Glycol	283
Triethylene tetramine	283
Trifluoroacetic acid	283
Triiron tetraoxide	283
Trilead tetraoxide	283
Trimethylamine 30%	283
2,2,4–Trimethylpentane	284
Triphenylphosphine	284
Tris(hydroxylmethyl) Aminomethane	284
Trisodium citrate dihydrate	284
Trisodium phosphate	284
Triton X–100	284
Tropaeolin O	284
L(–)–Tryptophan	284
Tungsten (VI) Oxide	284
Tween 20	285
Tween 40	285
Tween 60	285
Tween 80	285
L–Tyrosine	285

Tannic Acid CP

탄닌산, Tannin

● CAS No. 1401-55-4 ● EC No. 215-753-2 ● $C_{76}H_{52}O_{46}$ ● FW 1701.23

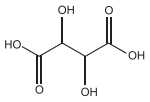
● Solub. in H_2O 250 g/l (20℃) ● pH value ~3.5 (100 g/l, H2O, 20℃) ● Bulk density ~ 220 kg/m³

● IMDG No Dangerous Good ● HS Code 3201 90 90

Appearance ····· Yellowish brown powder.
Loss on drying (at.105 ℃) ····· Max 12.0%

Product No.	Packing	Price(₩)
229	500g	28,500

DL-Tartaric Acid



주석산

● CAS No. 133-37-9 ● EC No. 205-105-7
● HOOCCH(OH)CH(OH)COO·nH_2O ● FW 150.09 (anh.)

● Solub. in alcohol 5.01 g/100g (25℃) ● Solub. in ether about 1% ● pH value 2.0 (0.1M aq. Sol.) ● Melting point 206℃

● IMDG No Good Dangerous Good
● HS Code 2918 12 00 ● Merck Index 10, 8945

DL-Tartaric Acid Extra Pure

Appearance ····· Colorless to white crystal or crystalline powder.
Assay ····· Min 99.5%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.02%
Chloride (Cl) ····· Max 0.002%
Phosphate (PO_4) ····· Max 5ppm
Sulfur compound(as SO_4) ····· Max 0.05%
Lead (Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.002%

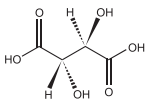
Product No.	Packing	Price(₩)
2556	1kg	19,500
2555	25kg	412,500

DL-Tartaric Acid CP

Appearance ····· White crystal or crystalline powder.
Chloride (Cl) ····· Max 0.005%
Sulfur compound (as SO_4) ····· Max 0.1%
Assay ····· Min 99.5%

Product No.	Packing	Price(₩)
226	500g	16,300

L(+)-Tartaric Acid Extra Pure



L(+)- 주석산, 2,3-Dihydroxybutanedioic acid

● CAS No. 87-69-4 ● EC No. 201-766-0
● HOOCCH(OH)CH(OH)COOH·$C_4H_6O_6$ ● FW 150.0

Spec. density 1.76 g/cm³ (20℃) ● Solub. In H_2O 1390 g/ℓ (20℃) ● pH value 1.6 (100g/ℓ, H_2O, 25℃) ● Melting point 168~170℃ ● Bulk Density 1000 kg/m³ ● Specific rotation $[\alpha]_D^{\delta}$ +12.0~+12.5° (C=5, H2O)

● HS Code 2918 12 00 ● RTECS WW787500

Product No.	Packing	Price(₩)
3662	1kg	30,000

TDI → *go to Toluene 2,4-Diisocyanate*

1,1,2,2-Tetrachloroethane

테트라클로로에테인

● CAS No. 79-34-5
● $CHCl_2CHCl_2$ ● FW 167.85

1,1,2,2-Tetrachloroethane Extra Pure

Product No.	Packing	Price(₩)
224	500g	Call

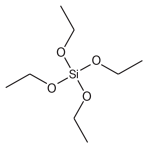
1,1,2,2-Tetrachloroethane GR

Product No.	Packing	Price(₩)
223	1kg	30,000

Tetrachloroethylene → *go to Perchloroethylene*

Tetradecanoic acid → *go to Myristic Acid*

Tetraethyl o-silicate Extra Pure



규산에틸, Tetraethyl orthosilicate, Ethyl Silicate28

● CAS No. 78-10-4 ● EC No. 201-083-8
● $(C_2H_5O)_4Si$ ● FW 208.33

● Vapour pressure 10hPa (20℃) ● Spec. density 0.93 g/cm³ (20℃) ● Explosive limits 1.3 ~ 23%(V) ● Flash point 45℃ ● Solub. in H_2O insoluble (slow decomposition) ● Melting point −85℃ ● Boiling point 168.0℃

● IMDG UN1292 TETRAETHYL SILICATE, 3, III ● HS Code 2920 90 85
● RTECS VV9450000

Appearance ····· Clear , Colourless liquid.
Assay (by GC) ····· Min 99.5%
Color (APHA) ····· Max 20
Density (at 20℃) ····· 0.930 ~ 0.939
Refractive index (at 20℃) ····· 1.380 ~ 1.385
Ethanol (C_2H_5OH) ····· Max 1.0%

Product No.	Packing	Price(₩)
222	500g	Call
3928	18 ℓ	Call

Tetrahydrofuran

테트라하이드로퓨란, THF, Tetrqmethylene oxide

● CAS No. 109-99-9 ● EC No. 203-726-8
● C_4H_8O ● FW 72.11

● Vapour pressure 173hPa (20℃) ● Spec. density 0.89 g/cm³ (20℃) ● Explosive limits 1.5 − 12.4 vol% ● Flash point −20℃ ● Solub. in H_2O (20℃) soluble ● pH value 7 − 8 (200 g/l, H_2O, 20℃) ● Melting point −108.5℃ ● Boiling point 65~66℃ ● Ignition temp. 215℃

● IMDG UN 2056 TETRAHYDROFURAN, 3, II ● HS Code 2931 11 00
● RTECS LU5950000 ● 제4류 제1석유류 (수용성액체) 400ℓ

T

Tetrahydrofuran EL

Assay (as C_4H_8O) ····· Min 99.5%
Color (APHA) ····· Max 10
Water ····· Max 0.05%
Residue after evaporation ····· Max 50 ppm
Peroxide (as H_2O_2) ····· Max 0.005%
Aluminum (Al) ····· Max 1 ppm
Barium (Ba) ····· Max 1 ppm
Arsenic (As) ····· Max 0.01 ppm
Boron (B) ····· Max 0.2 ppm
Cadmium (Cd) ····· Max 1 ppm
Calcium (Ca) ····· Max 1 ppm
Chromium (Cr) ····· Max 0.5 ppm
Cobalt (Co) ····· Max 0.1 ppm
Copper (Cu) ····· Max 0.1 ppm
Gallium (Ga) ····· Max 0.5 ppm
Germanium (Ge) ····· Max 1 ppm
Gold (Au) ····· Max 0.5 ppm
Iron (Fe) ····· Max 1 ppm
Lead (Pb) ····· Max 0.2 ppm
Lithium (Li) ····· Max 1 ppm
Magnesium (Mg) ····· Max 1 ppm
Manganese (Mn) ····· Max 1 ppm
Nickel (Ni) ····· Max 0.1 ppm
Potassium (K) ····· Max 1 ppm
Silicon (Si) ····· Max 1 ppm
Silver (Ag) ····· Max 0.5 ppm
Sodium (Na) ····· Max 1 ppm
Strontium (Sr) ····· Max 1 ppm
Tin (Sn) ····· Max 1 ppm
Zinc (Zn) ····· Max 1 ppm
Particle Count (0.5 micron and above) ····· Max 100 psc/ml

Product No.	Packing	Price(₩)
2911	3.8 ℓ	62,500

Tetrahydrofuran HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum UV Absorbance
210 nm ····· Max 1.00
215 nm ····· Max 0.60
230 nm ····· Max 0.30
254 nm ····· Max 0.10
UV Cutoff ····· Max 210nm
Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after Evaporation ····· Max 5ppm
Peroxides (as H_2O_2, at time of packaging) ····· Max 0.015%

Product No.	Packing	Price(₩)
218	4 ℓ	62,500

Tetrahydrofuran Stabilized with 250ppm BHT

Tetrahydrofuran Stabilized with 250ppm BHT ACS

Assay(by GC) ····· Min 99.0%
Color (APHA) ····· Max 20
Peroxide (as H_2O_2) ····· Max 0.015%
Residue after evaporation ····· Max 0.03%
Water ····· Max 0.05%
Stabilizer(BHT) ····· 200 ~ 300ppm

Product No.	Packing	Price(₩)
2561	1 ℓ	9,400

Tetrahydrofuran Stabilized with 250ppm BHT Extra Pure

Appearance ····· Colorless liquid.
Assay ····· Min 99.5%
Density (20℃) ····· 0.884 ~ 0.889g/ml
Water ····· Max 0.2%
Peroxide (as H_2O_2) ····· Max 0.005%
Stabilizer (BHT) ····· 200 ~ 300ppm

Product No.	Packing	Price(₩)
214	500㎖	10,500
215	1 ℓ	15,000
217	4 ℓ	52,000
216	18 ℓ	187,500

Tetrahydrofuran Stabilized with 250ppm BHT GR

Appearance ····· Clear.
Assay (by GC) ····· Min 99.5%
Density (20℃) ····· 0.884 ~ 0.889g/ml
Refractive index (n 20 D) ····· 1.406 ~ 1.409
Water ····· Max 0.05%
Peroxide (as H_2O_2) ····· Max 0.005%
Stabilizer (BHT) ····· 200 ~ 300ppm

Product No.	Packing	Price(₩)
212	500㎖	12,500
213	1 ℓ	19,000
4279	2.5 ℓ	28,500
2941	4 ℓ	53,800

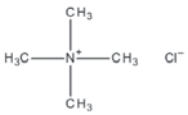
Tetrahydrofuran Stabilized with 250ppm BHT HPLC

Meets ACS Specification
Assay (by GC) ····· Min 99.5%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Peroxides (as H_2O_2, at the time of packaging) ····· Max 0.015%
Stabilizer (BHT) ····· 200~300ppm

Product No.	Packing	Price(₩)
219	4 ℓ	62,500

Tetrahydro-1,4-oxazine → *go to Morpholine*

Tetramethyl Ammonium Chloride Extra Pure NEW



염화테트라메틸암모늄, Methanaminium
● CAS No. 75-57-0 ● EC No. 200-880-8
● $C_4H_{12}ClN$ ● FW 109.60

● Vapor pressure (20 ℃) ● Spec. density 1.17 g/cm³ (20 ℃) ● Solub. in H_2O (20 ℃) soluble ● Melting point 〉300 ℃ ● pH value 6 – 8 (100 g/l, H_2O, 20 ℃) ● Flash point 〉100 ℃

● IMDG UN 2811 TOXIC SOLID, ORGANIC, N.O.S.(TETRAMETHYLAMMONIUMCHLORIDE), 6.1, III ● HS Code 2923 90 00

Product No.	Packing	Price(₩)
5211	500g	41,000

Tetramethylammonium Hydroxide 20% ELH

수산화테크라메틸암모늄20%, TMAH20%
● CAS No. 75-59-2
● $(CH_3)_4NOH$ ● FW 91.15

Assay ····· 19.5 ~ 20.5
Color ····· Max 10APHA
Carbonate (CO_3) ····· 300ppm
Chloride (Cl) ····· Max 5ppm
Aluminum (Al) ····· Max 10ppb
Barium (Ba) ····· Max 10ppb
Cadmium (Cd) ····· Max 10ppb
Calcium (Ca) ····· Max 10ppb
Chromium (Cr) ····· Max 10ppb
Cobalt (Co) ····· Max 10ppb
Copper (Cu) ····· Max 10ppb

Iron (Fe) ····· Max 10ppb
Lead (Pb) ····· Max 10ppb
Lithium (Li) ····· Max 10ppb
Magnesium (Mg) ····· Max 10ppb
Manganese (Mn) ····· Max 10ppb
Nickel (Ni) ····· Max 10ppb
Potassium (K) ····· Max 10ppb
Silver (Ag) ····· Max 10ppb
Sodium (Na) ····· Max 10ppb
Zinc (Zn) ····· Max 10ppb
Particle Count (0.5 micron and above) ····· Max 400pcs/ml

Product No.	Packing	Price(₩)
210	3.8 ℓ	75,000

NEW

Tetrazolium Salt — Extra Pure

블루테트라졸륨, Tetrazolium Blue Chloride
● CAS No. 1871-22-3
● $C_{40}H_{32}Cl_2N_8O_2$ ● FW 727.66

Product No.	Packing	Price(₩)
5212	25g	Call

THAM → *go to Tris(hydroxylmethyl) Aminomethane*

THF → *go to Tetrahydrofuran*

Thiamine hydrochloride — GR

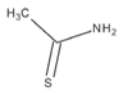
염산싸이아민
● CAS No. 67-03-8 ● $C_{12}H_{17}ClN_4OS \cdot HCl$ ● FW 337.27

Product No.	Packing	Price(₩)
208	25g	8,800

Thiazole Yellow G → *go to Titan Yellow*

NEW

Thioacetamide — Extra Pure



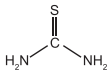
티오아세트아미드, Ethanethioamide
● CAS No. 62-55-5 ● EC No. 200-541-4
● C_2H_5NS ● FW 75.13

● Spec. density 1.37 g/cm³ ● Solub. in H_2O 163 g/l (25 ℃) ● Melting point 111 – 114 ℃ ● pH value 5.2 (100 g/l, H_2O, 20 ℃) ● Bulk density ~ 600 kg/m³

● IMDG NO Dangerous Good ● HS Code 2930 90 99

Product No.	Packing	Price(₩)
5213	25g	22,500

Thiourea



싸이오요소, Thiocarbamide
● CAS No. 62-56-6 ● EC No. 200-543-5
● H_2NCSNH_2 ● FW 76.12

● Spec. density 1.405 g/cm³(20℃) ● Solub. in H_2O 137 g/l(20℃) ● pH value 6 –8 (50g/l, H_2O, 20℃) ● Melting point 174 – 179 ℃ ● Bulk density 640 kg/m³ ● Ignition temp. 440℃ (dust)

● IMDG UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (THIOUREA), 9, III ● HS Code 2930 90 85

Thiourea — CP

Appearance ····· White crystal.
Assay ····· Min 95.0%
Chloride (Cl) ····· Max 0.05%
Sulfate(SO_4) ····· Max 0.03%
Heavy metals(as Pb) ····· Max 0.005%
Thiocyanate(SCN) ····· Max 0.05%

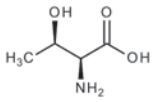
Product No.	Packing	Price(₩)
2906	500g	7,500
2934	1kg	12,500

Thiourea — Extra Pure

Product No.	Packing	Price(₩)
203	500g	7,500

NEW

L-Threonine for Biochemistry — GR



Chiral

L-트레오닌, (2S,3R)-2-Amino-3-Hydroxybutyric acid
● CAS No. 72-19-5 ● EC No. 200-774-1
● $C_4H_9NO_3$ ● FW 119.12

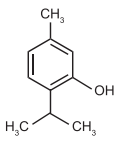
● Solub. in H_2O 90 g/l (20 ℃) ● Melting point 265 – 270 ℃ ● Bulk density ~ 370 kg/m³

● IMDG NO Dangerous Good ● HS Code 2922 50 00
● RTECS XO8590000

Appearance ····· White crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Specific rotation (α) 20 D ····· –27.5 ~ –29.0
Loss on drying (at 105℃) ····· Max 0.2%
Ignition residue (as Sulfate) ····· Max 0.1%
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.02%
Heavy metals (as Pb) ····· Max 0.01%
Arsenic (As) ····· Max 1%
Iron (Fe) ····· Max 0.003%
Ammonium (NH_4) ····· Max 0.02%
Foreign amino acid ····· To pass test

Product No.	Packing	Price(₩)
5076	25g	16,300

Thymol — Indicator



티몰, 5-Methyl-2-(1-methylethyl)phenol, 1-Methyl-3-hydroxy-4-isopropybenzene
● CAS No. 89-83-8 ● EC No. 201-944-8
● $CH_3C_6H_3CH(CH_3)_2OH$ ● FW 150.22

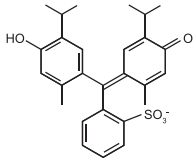
● Vapour pressure 2.5hPa (20℃) ● Spec. density 0.97 g/cm³(20℃) ● Flash point 104℃ c.c. (DIN 51758) ● Solub. in H_2O 0.98 g/l (25℃) ● pH value 5 – 7 (0.8 g/l, H_2O, 20℃) ● Melting point 49 – 51℃ ● Bulk density ~ 600kg/m³ ● Boiling point 233℃ (1013hPa) ● Kin. viscosity 4.3 (50℃) ● Ignition temp. 285℃

● IMDG UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (2,3-DIMETHYL-ARYLIC ACID), 8, III ● HS Code 2916 19 70

Product No.	Packing	Price(₩)
202	25g	8,800

T

Thymol Blue — Indicator



티몰블루, Thymolsulfonphthalein, TB
● CAS No. 76-61-9 ● EC No. 200-973-3
● $C_{27}H_{30}O_5S$ ● FW 466.58

● Solub. in H_2O (20℃) almost insoluble ● Melting point 221℃ ● Bulk density ~ 350kg/m³

● IMDG UN No Dangerous Good ● HS Code 2934 99 90

Appearance	Reddish brown to dark green colored crystalline powder or crystal.
Solubility in ethanol	To pass test
Solubility in NaOH Solution	To pass test
Absorbance(10mg/l, pH 7.6)	Min 0.27
Loss on drying	Max 1.0%
Ignition residue (as Sulfate)	Max 0.5%
pH range(Red) 1.2 ~ 2.8(yellow) 8.0 ~ 9.6(Blue)	1.2(적) ~ 2.8(황)
pH range(Red) 1.2 ~ 2.8(yellow) 8.0 ~ 9.6(Blue)	8.0(황) ~ 9.6(청)

Product No.	Packing	Price(₩)
201	25g	18,800

Thymol Blue Solution 0.1% — Indicator solution

Product No.	Packing	Price(₩)
200	500㎖	12,500

Thymolphthalein Solution 0.1% — Indicator solution

Product No.	Packing	Price(₩)
199	500㎖	11,400

Thymolsulfophthalein → *go to Thymol Blue*

Tin dichloride → *go to Stannous Chloride dihydrate*

Tin(II) diphosphate → *go to Tin Pyrophosphate*

Tin(IV) oxide → *go to Stannic Oxide*

Tin Powder — Extra Pure

주석, 분말
● CAS No. 7440-31-5 ● EC No. 231-141-8 ● Sn ● FW 118.711

● Vapour pressure 0hPa ● Spec. density 7.3g/cm³ (20℃) ● Solub. in H_2O (20℃) insoluble ● Melting point 232℃ ● Bulk density ~ 3700kg/m³ ● Boiling point 2260℃(1013 hPa)

● IMDG No Dangerous Good ● HS Code 8007 00 30 ● 2류 금속분 500kg

Appearance	Silver colored glossy metallic powder.
Copper (Cu)	Max 0.03%
Lead (Pb)	Max 0.05%
Antimony (Sb)	Max 0.03%
Iron (Fe)	Max 0.02%

Product No.	Packing	Price(₩)
198	500g	56,300

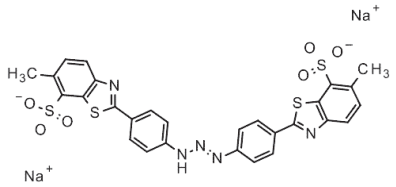
Tin (II) Pyrophosphate — CP

피로인산주석, Stannous pyrophosphate, Tin(II) Diphosphate
● CAS No. 15578-26-4 ● $Sn_2P_2O_7$ ● FW 411.36

Product No.	Packing	Price(₩)
196	25g	12,500

Tin(II) sulfate → *go to Stannous Sulfate*

Titan Yellow — Extra Pure NEW



티탄황색, Thiazole Yellow G, C.I.19540
● CAS No. 1829-00-1 ● EC No. 217-377-4
● $C_{28}H_{19}N_5Na_2O_6S_4$ ● FW 695.7

● Solub. in H_2O 29 g/l (24 ℃) ● Melting point 〉300 ℃ (decomposition) ● pH value 5.1 (10 g/l, H_2O, 20 ℃) ● Bulk density ~ 310 kg/m³

● IMDG NO Dangerous Good ● HS Code 3204 19 00

Product No.	Packing	Price(₩)
5214	25g	45,000

Titanium Dioxide — Extra Pure

이산화타이타늄, Titanic anhydride, Titanium(IV) oxide
● CAS No. 13463-67-7 ● EC No. 236-675-5 ● TiO_2 ● FW 79.88

● Spec. density ~ 4.2g/cm³ (20℃) ● Solub. in H_2O (20℃) insoluble ● pH value ~7 – 8 (100g/l, H_2O, 20℃)(slurry) ● Melting point 1855℃ ● Bulk density ~ 850kg/m³ ● Boiling point 2900℃

● IMDG No Dangerous Good ● HS Code 2823 00 00
● RTECS XR2275000

Appearance	White to off-white powder.
Assay	Min 98.5%
Water soluble substance	Max 0.1
Solubility in dil. HCl	Max 0.3
Ignition loss	Max 1.0%
Sulfate (SO_4)	Max 0.2%
Lead (Pb)	Max 0.005%
Arsenic (As)	Max 7ppm
Iron (Fe)	Max 0.1%

Product No.	Packing	Price(₩)
191	500g	9,000

Titanium, Powder — Extra Pure

타이타늄, 분말
● CAS No. 7440-32-6 ● EC No. 231-142-3 ● Ti ● FW 47.868

● Spec. density 4.5g/cm³ (20℃) ● Solub. in H_2O (20℃) insoluble (reaction) ● Melting point ~ 1670℃ ● Bulk density ~ 1260kg/m³ ● Boiling point 3260℃(1013 hPa) ● Ignition temp. 300 – 450℃

● IMDG UN 3089 METAL POWDER, FLAMMABLE, N.O.S., 4.1, II
● HS Code 81'08 20 00 ● RTECS XR1700000 ● Merck Index 10, 9303

Product No.	Packing	Price(₩)
195	500g	126,800

Titanium(Ⅳ) oxide → *go to Titanium Dioxide*

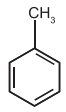
TMAH20% → *go to Tetramethylammonium Hydroxide 20%*

o-Tolidine Solution — Indicator solution

오쏘-톨리딘용액, 3,3'-Dimethyl benzidine
● CAS No. 119-93-7

Product No.	Packing	Price(₩)
190	500㎖	7,500

Toluene



톨루엔, Methylbenzene
● CAS No. 108-88-3 ● EC No. 203-625-9
● $C_6H_5CH_3$ ● FW 92.14

● Vapour pressure 29hPa (20℃) ● Spec. density 0.87 g/cm³ (20℃) ● Explosive limits 1.2 – 8 vol% ● Flash point 4℃ c.c. ● Solub. in H_2O 0.52g/l (20℃) ● Saturation conc. 110g/m³ (20℃) ● Melting point −95℃ ● Boiling point 110.6℃ ● Kin. viscosity 0.7 (20℃) ● Water absorption 0mg/kg ● Ignition temp. 535℃ (DIN 51794)

● IMDG UN UN 1294 TOLUENE, 3 II ● HS Code 2902 30 00
● RTECS XS5250000 ● 4류 제1석유류(비수용성액체) 200ℓ

Toluene — EL

Assay	Min 99.5%
Color (APHA)	Max 10
Acidity (as HCl)	Max 10ppm
Residue after evaporation	Max 2ppm
Water	Max 0.03%
Substances darkened by sulfuric acid	To pass test
Sulfur Compounds (as S)	Max 0.003%
Chloride (Cl)	Max 2ppm
Phosphate (PO_4)	Max 0.5ppm
Aluminum (Al)	Max 20ppb
Arsenic (As)	Max 10ppb
Barium (Ba)	Max 10ppb
Boron (B)	Max 20ppb
Cadmium (Cd)	Max 20ppb
Calcium (Ca)	Max 100ppb
Chromium (Cr)	Max 10ppb
Cobalt (Co)	Max 20ppb
Copper (Cu)	Max 20ppb
Gallium (Ga)	Max 50ppb
Germanium (Ge)	Max 50ppb
Gold (Au)	Max 20ppb
Iron (Fe)	Max 20ppb
Lead (Pb)	Max 50ppb
Lithium (Li)	Max 20ppb
Magnesium (Mg)	Max 10ppb
Manganese (Mn)	Max 10ppb
Nickel (Ni)	Max 20ppb
Potassium (K)	Max 50ppb
Silicon (Si)	Max 100ppb
Silver (Ag)	Max 20ppb
Sodium (Na)	Max 100ppb
Strontium(Sr)	Max 10ppb
Tin(Sn)	Max 30ppb
Zinc (Zn)	Max 20ppb
Particle Count (0.5 micron and above)	Max 100pcs/ml

Product No.	Packing	Price(₩)
188	3.8ℓ	18,800

Toluene — Extra Pure

Appearance	Clear, colorless liquid & characteristic odor.
Assay (by GC)	Min 99.5%
Density (20℃)	0.865 ~ 0.875g/ml
Water	Max 0.05%
Residue after evaporation	Max 0.01%
Acidity (as HCl)	To pass test
Sulfur Compounds (as S)	To pass test
Thiophene	To pass test
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
180	500㎖	3,800
181	1ℓ	5,600
182	18ℓ	43,800
2580	200ℓ	Call

Toluene — GR

Appearance	Clear, colorless liquid & characteristic odor.
Assay (by GC)	Min 99.5%
Density (20℃)	0.864 ~ 0.868g/ml
Refractive index (n 20 D)	1.496 ~ 1.498
Water	Max 0.03%
Residue after evaporation	Max 0.001%
Acidity (as HCl)	Max 0.001%
Sulfur Compounds (as S)	Max 0.003
Thiophene	To pass test
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
179	1ℓ	6,900
4114	2.5ℓ	11,000
3027	4ℓ	21,300
2581	18ℓ	50,000

Toluene — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry

Maximun UV Absorbance	
286 nm	Max 1.00
288 nm	Max 0.40
300 nm	Max. 0.10
350 nm	Max 0.01
UV Cutoff	Max 286nm
Assay (by GC)	Min 99.8%
Color (APHA)	Max 10
Water	Max 0.02%
Residue after evaporation	Max 5ppm
Sulfur Compounds (as S)	Max 0.003%
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
4278	2.5ℓ	26,300
187	4ℓ	31,300

Toluene — PESTICIDE

Extraction-Concentration Suitability

ECD Detectable Residue (as Heptachlor Epoxide)	Max 10ppt
Assay (by GC)	Min 99.8%
Color (APHA)	Max 10
Water	Max 0.03%
Residue after evaporation	Max 5ppm

Product No.	Packing	Price(₩)
184	4ℓ	37,500

T

Toluene — Ultimate

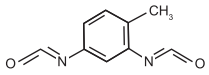
Extraction-Concentration Suitability
- ECD Detectable Residue (as Heptachlor Epoxide) ····· Max 10ppt
- FID Detectable residue (as 2-Octanol) ····· Max 5ppb

Ultraviolet Spectrophotometry
- Maximum UV Absorbance
- 286 nm ····· Max 1.00nm
- 288 nm ····· Max 0.40nm
- 300 nm ····· Max 0.10
- 350 nm ····· Max 0.01
- UV Cutoff ····· Max 286nm

Assay (by GC) ····· Min 99.9%
Color (APHA) ····· Max 10
Water ····· Max 0.02%
Residue after Evaporation ····· Max 1ppm
Fluorescence Background ····· To pass test
Sulfuric compounds(as S) ····· Max 0.003%
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
1722	4 ℓ	43,800

Toluene 2, 4-Diisocyanate — Extra Pure



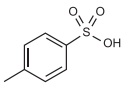
톨루엔디이소시아네이트, TDI
- CAS No. 584-84-9 • EC No. 209-544-5
- $C_9H_6N_2O_2$ • FW 174.16

- Vapour pressure 0.03hPa (20℃) • Spec. density 1.22g/cm³ (20℃) • Explosive limit 0.9 – 9.5Vol% • Flash point 127℃ (DIN 51798) • Solub. in H_2O (20℃) insoluble (decomposition) • Boiling point 247℃ (1013hPa) • Ignition temp. 620℃ (DIN 51794)

- IMDG UN 2078 TOLUENE DIISOCYANATE, 6.1, II • HS Code 2920 10 10
- RTECS CZ6300000 • Merck Index 10, 9358

Product No.	Packing	Price(₩)
3717	1kg	21,600

p-Toluene Sulfonic Acid — CP



파라-톨루엔설포닉산, PTSA, Toluene 4-sulfonic acid mono-hydrate
- CAS No. 6192-52-5 • EC No. 203-180-0
- $CH_3C_6H_4SO_3H \cdot H_2O$ • FW 190.22

- Flash point ~ 180℃ • Solub. in H_2O 750g/l (20℃) • pH value 1 (650g/l, 20℃)(anhydrous substance) • Melting point 56℃ (release of crystalline water) • Bulk density ~ 510kg/m³ • Boiling point 140℃ (27hPa) • Ignition temp. 600℃

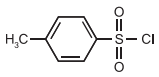
- IMDG UN 2585 ARYLSULPHONIC ACIDS, SOLID, 8, III
- HS Code 2904 10 00 • Merck Index 10, 9361

Solubility in water ····· To pass test
Chloride (Cl) ····· Max 0.002%
Lead (Pb) ····· Max 0.002%
Iron(Fe) ····· Max 0.002%
Ignition residue (as Sulfate) ····· Max 0.05%
Assay(after dried) ····· Min 99.0%

Product No.	Packing	Price(₩)
174	500g	6,900
175	25kg	150,000

4-Toluenesulfonyl Chloride → *go to p-Toluenesulfonyl Chloride*

p-Toluenesulfonyl Chloride



톨루엔술포닐클로라이드
4-methylbenzenesulfonyl chloride, Tosyl chloride, TsCl
- CAS No. 98-59-9 • EC No. 202-684-8
- $CH_3C_6H_4SO_2Cl$ • FW 190.65

- Spec. density 1.49 g/cm³ (20℃) • Flash point 128℃
- Solub. in H_2O Hydrolysis • pH value strongly acid (H_2O) • Melting point 67℃ • Boiling point 135.0℃(13 hPa)

- IMDG UN3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (4-TOLUENESULFONYL CHLORIDE), 8, III • HS Code 2904 90 95

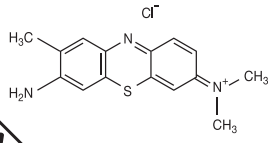
p-Toluenesulfonyl Chloride — Extra Pure NEW

Product No.	Packing	Price(₩)
5215	1kg	24,000

p-Toluenesulfonyl Chloride — CP

Product No.	Packing	Price(₩)
176	500g	13,800

Toluidine Blue — Extra Pure NEW



Toluidine blue O (C.I. 52040) Certistain
- CAS No. 92-31-9 • EC No. 202-146-2
- $C_{15}H_{16}ClN_3S$ • FW 305.83

- Solub. in H_2O 30 g/l (25 ℃) • pH value 2.8 (H_2O, 25 ℃) • Bulk density ~ 410 kg/m³

- IMDG NO Dangerous Good • HS Code 3204 13 00
- RTECS SP5670000

Product No.	Packing	Price(₩)
5216	25g	56,300

Tosylchloramide sodium → *go to Chloramine-T trihydrate*

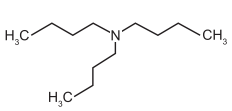
Tragacanth, Powder — Extra Pure

트라가칸트고무
- CAS No. 9000-65-1

Appearance ····· White to pale yellow, brown, flat or curved shaped pieces of keratin.
카라야고무 ····· To pass test
Ignition residue (as Sulfate) ····· Max 4.0%

Product No.	Packing	Price(₩)
172	500g	75,000

Tributylamine — Extra Pure



트리뷰틸아민, N,N-Dibuty-1-butane amine
- CAS No. 102-82-9 • EC No. 203-058-7
- $[CH_3(CH_2)_3]_3N$ • FW 185.35

- Vapour pressure 0.3 hPa (20℃) • Spec. density 0.78 g/cm³(20℃) • Explosive limit 1.4 – 6.0 Vol% • Flash point 86℃, o.c. • Solub. in H_2O 0.3 g/l (20℃) • pH value 10.6 (20℃)(saturated aqueous solution) • Melting point -70℃ • Boiling point 216 – 217℃ • Ignition temp. 190℃(DIN 51794)

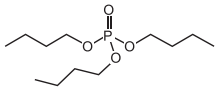
- IMDG UN 2542 TRIBUTYLAMINE, 6.1, II • HS Code 2921 19 80
- 4류 제2석유류(비수용성액체) 100ℓ • Merck Index 10, 9430

Appearance ····· Clear, colorless liquid.

Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 0.776 ~ 0.778g/ml
Water ····· Max.0.2%

Product No.	Packing	Price(₩)
1880	500㎖	14,600
170	1 ℓ	23,800

Tributyl phosphate — Extra Pure



트리뷰틸포스페이트, Phosphoric acid tributyl ester
● CAS No. 126-73-8 ● EC No. 204-800-2
● $C_{12}H_{27}O_4P$ ● FW 266.32

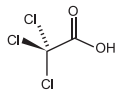
● Vapour pressure < 0.01hPa(20℃) ● Spec. density 1.20g/cm³(20℃) ● Flash point > 100℃. ● Solub. in H_2O 0.017 g/l(20℃) ● Melting point −9℃ ● Boiling point 140℃(13hPa) ● Ignition temp. > 150℃ (DIN51794))

● IMDG No Dangerous Good ● HS Code 2919 90 10
● RTECS TC7700000 ● Merck Index 10, 9431

Appearance ····· Clear, colorless liquid & characteristic odor.

Product No.	Packing	Price(₩)
171	1 ℓ	27,500

Trichloroacetic Acid — Extra Pure



트리클로로아세트산
● CAS No. 76-03-9 ● EC No. 209-927-2
● CCl_3COOH ● FW 163.39

● Vapour pressure 1 hPa (20℃) ● Spec. density 1.63 g/cm³(20℃) ● Flash point > 110℃. ● Solub. in H_2O 1300 g/l (20℃) ● pH value <1 (50 g/l, H_2O, 20℃) ● Melting point 54 − 56℃ ● Bulk density ~900kg/m³ ● Boiling point 197℃ ● Decomposition point above melting point ● Ignition temp. 711℃

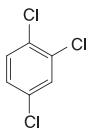
● IMDG UN 1839 TRICHLOROACETIC ACID, SOLID, 8 II ● HS Code 2915 40 00
● Merck Index 10, 9439

Appearance ····· Colorless crystal & deliquescent.
Solubility in water ····· To pass test
Ignition residue (as Sulfate) ····· Max 0.05%
Chloride (Cl) ····· Max 0.002%
Sulfate (SO_4) ····· Max 0.01%
Heavy metals (as Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%
Substances darkened by sulfuric acid ····· To pass test
Assay ····· Min. 99.0%

Product No.	Packing	Price(₩)
164	25g	6,000
165	500g	32,500

NEW

1,2,4-Trichlorobenzene — HPLC



● CAS No. 120-82-1 ● EC No. 204-428-0
● $C_6H_3Cl_3$ ● FW 181.46

● Vapour pressure 1.3hPa (20℃) ● Spec. density 1.45 g/cm³ (20℃) ● Explosive limits 2.5 ~ 6.6Vol% ● Flash point 99℃c.c. ● Solub.in H_2O 0.049 g/l (20℃) ● Saturation conc. 2 g/m³ ● Melting point 17℃ ● Boiling point 213.5℃ (1013 hPa) ● Ignition temp. 571℃

● IMDG UN 2321 TRICHLOROBENZENES, LIQU

Ultraviolet Spectrophotometry
Maximun UV Absorbance
310 nm ····· Max 1.00
350 nm ····· Max 0.15
375 nm ····· Max. 0.05
400 nm ····· Max 0.01
UV Cutoff ····· Max 310nm
Assay (by GC) ····· Min 99.0%
Water ····· Max 0.01%
Residue after evaporation ····· Max 5ppm
Density (at 20℃) ····· 1.452 ~ 1.458 g/ml
Refractive index (at 20℃) ····· 1.569 ~ 1.574

Product No.	Packing	Price(₩)
4578	2.5 ℓ	71,300
4579	3.8 ℓ	79,400

Trichloro Ethylene

트리클로로에틸렌
● CAS No. 79-01-6 ● EC No. 201-167-4
● $ClCH=CCl_2$ ● FW 131.39

● Vapour pressure 77 hPa (20℃) ● Spec. density 1.46 g/cm³(20℃) ● Explosive limit 7.9 − 100 Vol% (Saturation − at high volume fractions, explosion turns into a decomposition reaction) ● Solub. in H_2O 1 g/l (20℃) ● Saturation conc. 415 g/m³ (20℃) ● Melting point −86℃ ● Boiling point 87℃ ● Ignition temp. 410℃

● IMDG UN 1710 TRICHLOROETHYLENE, 6.1, III ● HS Code 2903 22 00

Trichloro Ethylene — EL

Assay ····· Min 99.0%
Color ····· Max 10APHA
Residue after evaporation ····· Max 5ppm
Acidity (as HCl) ····· Max 10ppm
Water ····· Max 0.005%
Chloride (Cl) ····· Max 1ppm
Phosphate (PO_4) ····· Max 0.1ppm
Aluminum (Al) ····· Max 50ppb
Arsenic (As) ····· Max 10ppb
Barium (Ba) ····· Max 50ppb
Boron (B) ····· Max 10ppb
Cadmium (Cd) ····· Max 20ppm
Calcium (Ca) ····· Max 20ppb
Chromium (Cr) ····· Max 20ppb
Cobalt (Co) ····· Max 20ppb
Copper (Cu) ····· Max 10ppb
Gallium (Ga) ····· Max 20ppb
Germanium (Ge) ····· Max 20ppb
Gold (Au) ····· Max 20ppb
Iron (Fe) ····· Max 50ppb
Lead (Pb) ····· Max 10ppb
Lithium (Li) ····· Max 50ppb
Magnesium (Mg) ····· Max 30ppb
Manganese (Mn) ····· Max 20ppb
Nickel (Ni) ····· Max 10ppb
Potassium (K) ····· Max 100ppb
Silicon (Si) ····· Max 50ppb
Silver (Ag) ····· Max 20ppb
Sodium (Na) ····· Max 100ppb
Strontium(Sr) ····· Max 20ppb
Tin(Sn) ····· Max 20ppb
Titanium(Ti) ····· Max 10ppb
Zinc (Zn) ····· Max 20ppb
Particle Count (0.5 micron and above) ····· Max 100pcs/ml

Product No.	Packing	Price(₩)
168	3.8 ℓ	Call

T

Trichloro Ethylene — Extra Pure

Appearance ····· Clear, colorless liquid & characteristic odor.
Assay (by GC) ····· Min 99.5%
Density (20℃) ····· 1.461 ~ 1.469g/ml
Refractive index (n 20 D) ····· 1.477 ~ 1.479
Water ····· Max 0.05%
Residue after evaporation ····· Max 0.01%
Acidity (as HCl) ····· Max 0.002%
Ammonium silver reducing substances ····· To pass test
Free chlorine ····· To pass test
Substances darkened by sulfuric acid ····· To pass test

Product No.	Packing	Price(₩)
166	1kg	8,000
167	25kg	118,800

1,1,1-Trichloroethane — Extra Pure

트리클로로에테인, Methylchloroform
● CAS No. 71-55-6 ● EC No. 200-756-3
● CH_3Cl_3 ● FW 133.40

● Vapour pressure 133 hPa (20℃) ● Spec. density 1.34 g/cm³(20℃) ● Explosive limit 8.0 – 15.5 Vol% ● Solub. in H_2O 1.29 g/l (25℃) ● Melting point –30.6℃ ● Boiling point 74℃(1013 hPa) ● Ignition temp. 490℃(DIN 51794)

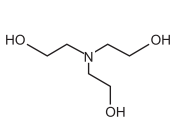
● IMDG UN 2831 1,1,1-TRICHOROETHAN, 6.1, III ● HS Code 2903 19 00

Appearance ····· Colorless liquid.
Assay (by GC) ····· 98.5 ~ 101.0%
Color (APHA) ····· Min 99.0%
Water ····· Max 1%
Residue after evaporation ····· Max 0.001%
Titrable acid ····· Max 0.0003 meq/g

Product No.	Packing	Price(₩)
552	500g	5,300
554	1kg	8,800
555	25kg	Call

Trichloromethane → *go to Chloroform*

Triethanolamine — Extra Pure



트리에탄올아민,Tris(2-hydrocyethyl)amine, 2,2',2"-Trihy droxytriethylamine, TEA
● CAS No. 102-71-6 ● EC No. 203-049-8
● $(HOCH_2CH_2)_3N$ ● FW 149.19

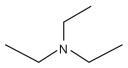
● Vapour pressure < 0.01hPa (20℃) ● Spec. density 1.12 g/cm³(20℃) ● Explosive limit 3.6 – 7.2 Vol% ● Flash point 190℃ c.c. ● Solub. in H_2O (20℃) freely soluble ● Melting point 21℃ ● Boiling point 360℃ (1013hPa) (decomposition) ● Ignition temp. 325℃ (DIN 51794)

● IMDG No Dangerous Good ● HS Code 2922 13 10
● RTECS KL9275000 ● Merck Index 10, 9476

Appearance ····· Colorless to light yellow, viscose, hygroscopic liquid.
Assay (by GC) ····· Min 98.0%
Solubility in water ····· To pass test
Density (20℃) ····· 1.120 ~ 1.128g/ml
Ignition residue (as Sulfate) ····· Max 0.01%
Lead (Pb) ····· Max 0.001%
Iron (Fe) ····· Max 0.001%

Product No.	Packing	Price(₩)
159	500g	5,600
160	1kg	9,400
161	20kg	106,300

TriethylAmine



트리에틸아민, N,N-Diethylethanamine
● CAS No. 121-44-8 ● EC No. 204-469-4
● $(C_2H_5)_3N$ ● FW 101.19

● Vapour pressure 69hPa (20℃) ● Spec. density 0.73 g/cm³(20℃) ● Explosive limit 1.2 – 9.3 Vol% ● Flash point –11℃. o.c. ● Solub. in H_2O 133 g/l (20℃) ● pH value 12.7 (100g/l H_2O, 15℃) ● Saturation conc. 256 g/m³ (20℃) ● Melting point –115℃ ● Boiling point 90℃ ● Ignition temp. 215℃

● IMDG UN 1296 TRIETHYLAMINE, 3 (8), II ● HS Code 2921 19 10
● RTECS YE0175000 ● Merck Index 10, 9477

TriethylAmine — Extra Pure

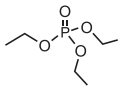
Appearance ····· Coloeless liquid, ammonia-like odor.
Solubility in water ····· To pass test
Density (20℃) ····· 0.726~0.734g/ml
Water ····· Max 0.5%
Residue after evaporation ····· Max 0.05%
Assay (by GC) ····· Min 98.0%

Product No.	Packing	Price(₩)
155	500㎖	8,800
156	1 ℓ	13,800
2592	18 ℓ	112,500

TriethylAmine — GR

Product No.	Packing	Price(₩)
4087	4 ℓ	47,500

Triethyl Phosphate — Extra Pure



인산트리에칠, Phosphoric acid ethyl ester
● CAS No. 78-40-0 ● EC No. 201-114-5
● $(C_2H_5O)_3PO$ ● FW 182.16

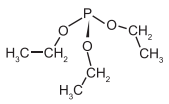
● Vapour pressure 0.1 hPa (20℃) ● Spec. density 1.069 g/cm³(20℃) ● Explosive limit 1.2 – 10 Vol% ● Flash point 130℃ ● Solub. in H_2O 500 g/l (25℃) (slow decomposition) ● pH value –57℃ ● Boiling point 215℃(1013 hPa) ● Ignition temp. 480℃ (DIN 51794)

● IMDG No Dangerous Good ● HS Code 2919 90 00
● RTECS TC7900000 ● HS ● 4류 제3석유류(수용성액체) 4000ℓ
● Merck Index 10, 9479

Assay (by GC) ····· Min 99.0%
Density (20℃) ····· 1.405 ~ 1.407 g/ml

Product No.	Packing	Price(₩)
2910	500㎖	16,300

Triethyl Phosphite — Extra Pure



아인산트리에틸

- CAS No. 122-52-1 • EC No. 204-552-2
- $(C_2H_5O)_3P$ • FW 166.16

- Vapour pressure < 6hPa (20℃) • Spec. density 0.956 g/cm³ (20℃) • Explosive limit 3.75 – 42.5 Vol%
- Flash point 52℃ c.c. • Boiling point 156 – 158℃
- Ignition temp. 250℃ (DIN 51794)

- IMDG UN 2323 TRIETHYL PHOSPHITE, 3, III • HS Code 2920 90 40
- 4류 제2석유류(비수용성액체) 1000ℓ

Assay (by GC) ····· Min 97.0%
Density (20℃) ····· 0.954 ~ 0.963 g/ml
Refractive Index (n 20 D) ····· 1.411 ~ 1.416

Product No.	Packing	Price(₩)
2590	500㎖	22,500

Triethylene diamine — Extra Pure

트리에틸렌디아민, Dabco

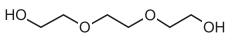
- CAS No. 280-57-9 • EC No. 205-999-9
- $C_6H_{12}N_2$ • FW 112.17

- Vapour pressure 0.68hPa (21℃) • Spec. density 1.14g/cm³ (25℃) • Flash point 62.2℃ • Solub. in H_2O 3.9g/l • pH value (H_2O, 20℃)alkaline (aqueous solution) • Melting point 155 – 158℃ • Bulk density 800kg/m³ • Boiling point 174 – 176℃ (1013hPa) • Ignition temp. 350℃

- IMDG UN 1325 FLAMMABLE SOLID, ORGANIC, N.O.S. (1,4-DIAZABICYCLO-OCTANE), 4.1, II • HS Code 2933 59 20
- RTECS HM0354200 • Merck Index 10, 9479

Product No.	Packing	Price(₩)
154	500g	60,000
3583	25kg	Call

Triethylene Glycol



트리에틸렌글리콜, Triglycol

- CAS No. 112-27-6 • EC No. 203-953-2
- $HO(CH_2CH_2O)_2CH_2CH_2OH$ • FW 150.17

- Vapour pressure < 0.01hPa (20℃) • Spec. density 1.123 g/cm³(20℃) • Explosive limit 0.9 – 9.2 Vol%
- Flash point ~ 165℃ c.c. • Solub. in H_2O (20℃) soluble • pH value 6.5 – 7.5 (100g/l H_2O, 20℃)
- Melting point –7℃ • Boiling point 285 – 295℃ (1013hPa) • Ignition temp. 370℃ (DIN 51794)

- IMDG No Dangerous Good • HS Code 2909 49 18
- 4류 제3석유류(수용성액체) 4000ℓ • Merck Index 10, 9480

Triethylene Glycol — Extra Pure

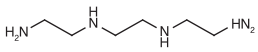
Product No.	Packing	Price(₩)
5223	20kg	125,000

Triethylene Glycol — CP

Density(20℃) ····· 1.122 ~ 1.126g/ml

Product No.	Packing	Price(₩)
153	500g	7,000
2594	20kg	100,000

Triethylene tetramine — CP



트리에틸렌테트라민,
N,N'-Bis(2-aminoethyl)-1,2-ethanediamine

- CAS No. 112-24-3 • EC No. 203-950-6
- $(H_2NCH_2CH_2NHCH_2)_2$ • FW 146.23

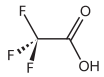
- Refractive index 1.4971 (20℃, 589nm) • Vapour pressure < 0.01hPa (20℃) • Spec. density 0.98 g/cm³(20℃) • Explosive limit 0.7 ~ 7.2%(V)
- Flash point 129℃ • Solub. in H_2O (20℃) soluble
- pH value 10~11 (10g/ℓ, H_2O, 20℃) • Melting point 12℃ • Boiling point 270~300℃(1013 hPa)

- IMDG UN2259 TRIETHYLENETETRAMINE, 8, II • HS Code 2921 29 00
- RTECS YE6650000 • 4류 3석유류 (수용성 액체) 4000ℓ

Appearance ····· Colorless-Yellowish color lipuid.
Assay (by GC) ····· Min 60.0%
Solubility in water ····· To pass test
Specific gravity at 20℃ ····· 0.975 ~ 0.981℃
Refractive index at 20℃ ····· 1.459 ~ 1.501℃

Product No.	Packing	Price(₩)
3723	500g	18,000

Trifluoroacetic acid — GR



트리플루오로아세트산,
4-Hydroxy-4-Methyl-2-Pentanone

- CAS No. 76-05-1 • EC No. 200-929-3
- CF_3COOH • FW 114.02

- Vapour pressure 141hPa (20℃) • Spec. density 1.48 g/cm³ (20℃) • Explosive limits 1.2 – 8 vol%
- Flash point 4℃ c.c. • Solub. in H_2O Soluble
- Melting point –15℃ • Boiling point 72℃ (1013hPa)

- IMDG UN2699 TRIFLUOROACETIC ACID, 8, I • HS Code 2915 00 00

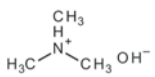
Appearance ····· Clear liquid.
Assay(by GC) ····· Min 99.5%
Color(APHA) ····· Max 50
Water ····· Max 0.5%
Residue after evaporation ····· Max 0.02%

Product No.	Packing	Price(₩)
3601	500g	45,000
4362	4ℓ	312,500

Triiron tetraoxide → *go to Iron(II, III) Oxide black*

Trilead tetraoxide → *go to Lead(II, IV) Oxide, Red*

Trimethylamine 30% — Extra Pure NEW



트리메틸아민

- CAS No. 75-50-3 • EC No. 200-875-0
- C_3H_9N • FW 59.11

- Vapor pressure 600 hPa (20 ℃) • Spec. density 0.64 g/cm³ (20 ℃) • Solub. in H_2O (20 ℃) soluble • Melting point –2 ℃ • pH value 13 (H_2O, 20 ℃) • Explosive limit 2 – 11.6 %(V) (anhydrous substance) • Flash point –45 ℃ • Ignition temp. 250 ℃ • Boiling point 30 – 100 ℃

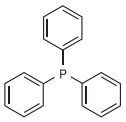
- IMDG UN 1297 TRIMETHYLAMINE, AQUEOUS SOLUTION, 3 (8), II
- HS Code 2921 11 00 • RTECS PA0350000 • Merck Index 10, 9517

Product No.	Packing	Price(₩)
5217	1ℓ	16,300

2,2,4-Trimethylpentane → *go to Iso-Octane*

NEW

Triphenylphosphine — Extra Pure



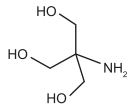
트리페닐포스핀
● CAS No. 603-35-0 ● EC No. 210-036-0
● $C_{18}H_{15}P$ ● FW 262.29

● Vapor pressure 0.01 hPa (88℃) ● Spec. density 1.075 g/cm³ (20℃) ● Solub. in H_2O 〈 – 0.0001 g/l (25 ℃) ● Melting point 78.5 – 81.5 ℃ ● Flash point 182 ℃ ● Ignition temp. 425 ℃ ● Boiling point 195 – 205 ℃ (7 hPa) ● Bulk density ~ 500 – 600 kg/m³

● IMDG NO Dangerous Good ● HS Code 2931 00 95
● Merck Index 10, 9548

Product No.	Packing	Price(₩)
5218	500g	45,000

Tris(hydroxymethyl) Aminomethane — Extra Pure



트리스, Tromethamine, 2-Amino-2-(hydroxymethyl)-1, 3-propanediol, THAM, TRIS buffer
● CAS No. 77-86-1 ● EC No. 201-064-4
● $H_2NC(CH_2OH)_3$ ● FW 121.14

● Spec. density 1.353 g/cm³ (23℃) ● Solub. in H_2O 800 g/l (20℃) ● pH value 10.2 – 10.6 (6 g/l H_2O, 20℃) ● Melting point 169 – 172℃ ● Bulk density ~ 840kg/m³ ● Boiling point 219 – 220℃ (13.3hPa)

● IMDG No Dangerous Good ● HS Code 2922 19 80
● RTECS TY2900000

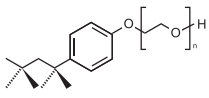
Appearance	White to light yellow crystal or crystalline powder.
Assay	Min 99.0%
Solubility in water	To pass test
Melting point	169 ~ 173℃
Loss on drying(at.105 ℃, 2hr.)	Max 0.5%
Ignition residue (as Sulfate)	Max 0.05%
pH (M/10 Sol. 25℃)	10.0 ~ 10.8
Chloride (Cl)	Max 0.001%
Sulfate (SO_4)	Max 0.001%
Copper (Cu)	Max 5ppm
Lead (Pb)	Max 5ppm
Iron(Fe)	Max 5ppm

Product No.	Packing	Price(₩)
5052	500g	45,000

Trisodium citrate dihydrate
→ *go to Sodium Citrate tribasic dihydrate*

Trisodium phosphate
→ *go to Sodium Phosphate tribasic 12-water*

Triton X-100 — Extra Pure



트리톤 엑스-100, Polyoxyethylene Octylphenyl Ether
● CAS No. 9002-93-1
● $C_8H_{17}C_6H_4(OCH_2CH_2)_nOH$(n=9~10) ● FW 645.85

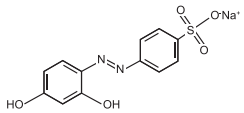
● Vapour pressure < 0.01hPa (20℃) ● Spec. density 1.07g/cm³ (20℃) ● Flash point 251℃ c.c. ● Solub. in H_2O (20℃) soluble ● pH value 6 –8 (10g/l H_2O, 20℃) ● Boiling point > 200℃ (1013hPa)

● IMDG UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OCTYLPHENOXYPOLYETHOXYETHANOL), 9, III, Marine Pollutant: P
● HS Code 3402 13 00 ● RTECS MD0907700

Appearance	Clear to yellow liquid.
Solubility in water	To pass test
pH(1% Sol.)	5.5~6.5
Hydroxyl value	Min 80.0

Product No.	Packing	Price(₩)
5258	1kg	18,800
2600	20kg	225,000

Tropaeolin O — Indicator

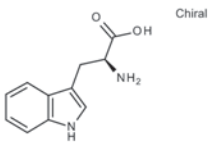


트리페올린, CI 14270
● CAS No. 547-57-9
● $C_{12}H_9N_2NaO_5S$ ● FW 316.27

Product No.	Packing	Price(₩)
144	25g	19,500

NEW

L(-)-Tryptophan — GR



L-트립토판, 3-(4-Hydroxyphenyl)-L-Alanine
● CAS No. 73-22-3 ● EC No. 200-795-6
● $C_{11}H_{12}N_2O_2$ ● FW 204.23

● Solub. in H_2O 10 g/l (20℃) ● pH value 5.5 – 7.0 (10 g/l, H_2O, 20 ℃) ● Melting point 290 ℃ (decomposition) ● Bulk density ~ 400 kg/m³

● IMDG NO Dangerous Good ● HS Code 2933 99 00
● RTECS YN6130000 ● Merck Index 10, 9598

Appearance	White crystalline powder.
Assay	Min 99.0%
Loss on drying (at 105℃, 3hr)	Max 0.2%
Ignition residue (as Sulfate)	Max 0.5%
Solubility in water	To pass test
Specific rotation (α) 20 D	–30.5 ~ –32.5℃
Foreign amino acid	To pass test
Chloride (Cl)	Max 0.01%
Sulfate (SO_4)	Max 0.02%
Heavy metals (as Pb)	Max 0.001%
Iron (Fe)	Max 0.001%
Arsenic (As)	Max 1ppm
Ammonium (NH_4)	Max 0.02%

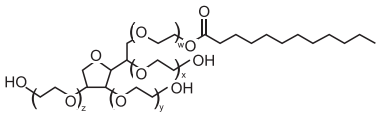
Product No.	Packing	Price(₩)
5065	25g	16,300

Tungsten (VI) Oxide — Extra Pure

삼산화텅스텐
● CAS No. 1314-35-8 ● WO_3 ● FW 231.85

Product No.	Packing	Price(₩)
2602	25g	9,800
142	500g	90,000

Tween 20



트윈 20, Polyoxyethylene sorbitan monolaurate
- CAS No. 9005-64-5
- $C_{58}H_{114}O_{26}$ • FW 1227.72

- Vapour pressure < 1.4hPa (20℃) • Spec. density 1.1g/cm³ (25℃) • Flash point > 149℃ (DIN 51798) • Solub. in H_2O (25℃) soluble • pH value 6 –8 (50g/l H_2O, 20℃) • Boiling point > 100℃

- IMDG No Dangerous Good • HS Code 3402 13 00 • RTECS TR400000

Appearance ····· Clear, yellow to yellow-green viscous liquid.
pH (1 %) ····· 5.5 ~ 7.5
Water ····· Max 3.0%
Acid value ····· Max 2.0
Saponification value ····· 47.0 ~ 53.0

Tween 20 — Extra Pure

Product No.	Packing	Price(₩)
2603	18kg	135,000

Tween 20 — CP

Product No.	Packing	Price(₩)
139	500g	8,000

Tween 40 — CP

트윈 40, Polyoxyethylene sorbitan monopalmitate, Polysorbate
- CAS No. 9005-66-7

- Spec. density 1.09g/cm³ (20℃) • Flash point > 149℃ • Solub. in H_2O (20℃) soluble • Boiling point > 100℃

- IMDG No Dangerous Good • HS Code 3402 13 00

Appearance ····· Yellow Oily Liquid.
Acid value ····· Max 2.00
Water Content ····· 2.5 ~ 3.0%
Hydroxyl value ····· 89.0 ~ 105.0
Saponification value ····· 43.0 ~ 49.0

Product No.	Packing	Price(₩)
138	500g	8,000

Tween 60 — CP

트윈 60, Polyoxyethylene sorbitan monostearate, Polysorbate
- CAS No. 9005-67-8

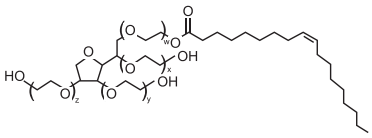
- Vapour pressure < 10hPa (20℃) • Spec. density 1.1g/cm³ (20℃) • Flash point > 149℃ • Solub. in H_2O (25℃) soluble • Boiling point > 100℃

- IMDG No Dangerous Good • HS Code 3402 13 00

Appearance ····· Clear or yellow , viscosity liquid.
Water ····· Max 3.0%
pH (1 %) ····· 5.0 ~ 8.0
Acid value ····· Max 2.0 mgKOH/g
Saponification value ····· 45.0 ~ 55.0 mgKOH/g
Hydroxyl value ····· 81.0 ~ 96.0 mgKOH/g
Residue on ignition ····· Max 1.0%

Product No.	Packing	Price(₩)
137	500g	8,000

Tween 80 — Extra Pure



트윈 80, Polyoxyethylene sorbitan monooleate
- CAS No. 9005-65-6

- Vapour pressure < 1.33hPa (20℃) • Spec. density 1.07 g/cm³ (25℃) • Flash point > 149℃ c.c. • Solub. in H_2O (20℃) soluble • pH value 5 – 7 (50g/l H_2O, 20℃) • Boiling point > 100℃ • Kin. viscosity 300 – 500 (25℃) • Ignition temp. > 180℃

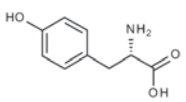
- IMDG No Dangerous Good • HS Code 3402 13 00

Appearance ····· Clear, yellow to yellow-green viscous liquid.
Density (20℃) ····· 1.065 ~ 1.095g/ml
pH (5 %) ····· 5.5 ~ 7.5
Acid value ····· Max 2.0
Iodine value ····· Max 24.0
Saponification value ····· Max 55.0

Product No.	Packing	Price(₩)
4790	500g	8,000
4751	1kg	14,000
5253	18kg	135,000

L-Tyrosine — GR

NEW



Chiral

L-티로신
- CAS No. 60-18-4 • EC No. 200-460-4
- $C_9H_{11}NO_3$ • FW 181.19

- Solub. in H_2O 0.38 g/l (20℃) • Melting point 297 – 298 ℃ (decomposition) • Spec. density 1.46 g/cm³ (20 ℃) • Bulk density ~ 300 kg/m³

- IMDG NO Dangerous Good • HS Code 2922 50 00
- RTECS YP2275600

Appearance ····· White crystalline powder.
Assay (after dried) ····· Min 99.0%
Solubility in dilute hydrochloric acid ····· To pass test
Specific rotation (α) 20 D ····· –11.3 ~ –12.1℃
Loss on drying (at 105℃) ····· Max 0.2%
Ignition residue (as Sulfate) ····· Max 0.1%
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.001%
Arsenic (As) ····· Max 2ppm
Iron (Fe) ····· Max 0.001%
Ammonium (NH_4) ····· Max 0.025
Other amino acid ····· To pass test

Product No.	Packing	Price(₩)
5075	25g	11,300

T

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

U

Alphabetical list Numbers

List of U

Product	Page
Ultra clean	289
Unicide 128	289
Uranine Solution	289
Urea	289

Ultra Clean 살균소독제 기구등

울트라크린

음이온 계면활성제 ····· Max 10%
비이온 계면활성제 ····· Max 10%
무기염 ····· Max 5%

Product No.	Packing	Price(₩)
3549	3.8ℓ	19,500

Unicide 128 살균소독제 기구등

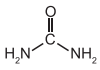
유니사이드

Product No.	Packing	Price(₩)
2610	4ℓ	19,500

Uranine Solution Indicator Solution

Product No.	Packing	Price(₩)
2611	500㎖	12,500

Urea Extra Pure



요소, Carbamide
● CAS No. 57-13-6 ● EC No. 200-315-5
● NH_2CONH_2 ● FW 60.6

● Vapour pressure < 0.1 hPa (20℃) ● Spec. density 1.34 g/cm³ (20℃) ● Solub. in H_2O 1000 g/l (20℃) ● pH value ~9 (100 g/l, 20℃) ● Melting point 133℃ ● Bulk density 720 – 760 kg/m³

● IMDG No Dangerous Good
● HS Code 3102 10 10 ● RTECS YR6250000 ● Merck Index 10, 9671

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
Solubility in ethanol ····· To pass test
Melting point ····· 132 ~ 136℃
Chloride (Cl) ····· Max 0.003%
Sulfate (SO_4) ····· Max 0.005%
Lead (Pb) ····· Max 20ppm
Iron (Fe) ····· Max 20ppm
Substances reducing by fehling sol. ····· To pass test

Product No.	Packing	Price(₩)
129	500g	5,000
3079	25kg	62,500

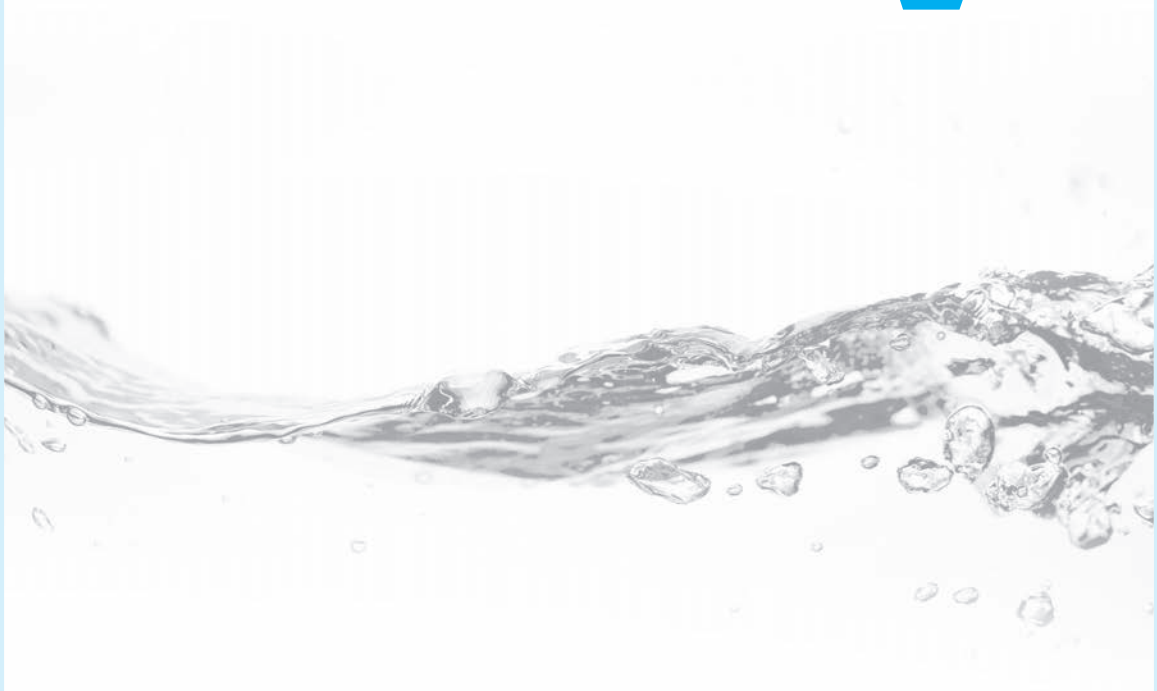
U

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

V



Alphabetical list Numbers

List of V

Product	Page
Vacuum Pump Oil	293
Vanadium(V) oxide	293
Vanadium pentoxide	293
L-Valine	293
Vanillin	293
Vaseline White	293
Vinylbenzene	293
Vitamin B2	293
Vitamin C	293

Vacuum Pump Oil CP

진공펌프유

Product No.	Packing	Price(₩)
128	1ℓ	9,800

Vanadium(V) oxide → *go to Vanadium pentoxide*

Vanadium pentoxide Extra Pure

산화바다늄, Vanadic anhydride, Vanadium (V) oxide

● CAS No. 1314-62-1 ● EC No. 215-239-8 ● V_2O_5 ● FW 181.88

● Spec. density 3.36 g/cm³ (25℃) ● Solub. in H_2O (20℃) slightly soluble ● pH value ~4 (50g/l, H2O, 20℃)(slurry) ● Melting point 690℃ ● Bulk density ~ 400 – 600kg/m³ ● Boiling point ~ 1750℃ (decomposition)

● IMDG UN 2862 VANADIUM PENTOXIDE, 6.1, III

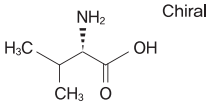
● HS Code 2825 30 00

Appearance ····· Orange-yellow powder.
Assay ····· Min 98.0%
Solubility in NH_4OH ····· To pass test
Chloride (Cl) ····· Max 0.05%
Sulfate (SO_4) ····· Max 0.05%

Product No.	Packing	Price(₩)
125	25g	7,000
126	500g	45,000
2614	1kg	82,500

NEW

L-Valine GR



L-발린

● CAS No. 72-18-4 ● EC No. 200-773-6

● $(CH_3)_2CHCH(NH_2)COOH$ ● FW 117.15

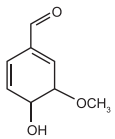
● Spec. density 1.23 g/cm³ (20 ℃) ● Solub. in H_2O 85 g/l (20℃) ● pH value ~ 5.5 – 6.5 (100 g/l, H_2O, 20 ℃) ● Melting point 315 ℃ ● Bulk density ~ 400 kg/m³

● IMDG NO Dangerous Good ● HS Code 2933 99 80

Appearance ····· White crystalline powder.
Assay (after dried) ····· Min 99.0%
Solubility in water ····· To pass test
Melting point ····· 107 ~ 110℃
Specific rotation (α) 20D ····· +27.0 ~ +28.5
Loss on drying (105) ····· Max 0.2%
Ignition residue (as Sulfate) ····· Max 0.05%
Chloride (Cl) ····· Max 0.02%
Sulfate (SO_4) ····· Max 0.02%
Heavy metals (as Pb) ····· Max 0.001%
Arsenic (As) ····· Max 1ppm
Iron (Fe) ····· Max 0.001%
Ammonium (NH_4) ····· Max 0.02%
Foreign amino acid ····· To pass test

Product No.	Packing	Price(₩)
4682	25g	14,000

Vanillin GR



바니린, 4-Hydroxy-3-methoxybenzaldehyde

● CAS No. 121-33-5 ● EC No. 204-465-2

● $C_8H_8O_3$ ● FW 152.15

● Spec. density 1.06g/cm³ (20℃) ● Flash point 153℃ c.c ● Solub. in H_2O 10g/l (25℃) ● pH value 4.3 (10g/l, H2O, 20℃) ● Melting point ~ 82℃ ● Bulk density ~ 600kg/m³ ● Boiling point ~ 154℃ (13hPa) ● Ignition temp. > 400℃

● IMDG No Dangerous Good

● HS Code 2912 41 00 ● Merck Index 10, 9734

Product No.	Packing	Price(₩)
124	25g	5,500

Vaseline White Extra Pure

바세린, 백색

● CAS No. 8009-03-8

Appearance ····· White to light yellow colored ointment like material .
Acidity or alkalinity ····· To pass test
Fats or Rosin ····· To pass test
Heavy metals ····· Max 30ppm

Product No.	Packing	Price(₩)
5364	500g	7,500

Vinylbenzene → *go to Styrene Monomer*

Vitamin B2 → *go to Riboflavin*

Vitamin C → *go to L-Ascorbic Acid*

V

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

W

Alphabetical list Numbers

List of W

Product	Page
Water	297
Wijs' solution	297

Water

순수

● CAS No. 7732-18-5 ● EC No. 231-791-2 ● H_2O ● FW 18.02

● Vapour pressure 23 hPa (20℃) ● Spec. density 1.00 g/cm³ (20℃) ● pH value (20℃)neutral ● Melting point 0℃ ● Boiling point 100℃

● IMDG No Dangerous Good
● HS Code 2853 00 10 ● RTECS ZC0110000 ● Merck Index 10, 9853

Water — Extra Pure

Appearance ····· Clear, colorless liquid.
Acidity or alkalinity ····· To pass test
Chloride (Cl) ····· To pass test
Sulfate(SO_4) ····· To pass test
Nitrate nitrogen ····· To pass test
Nitrite nitrogen ····· To pass test
Ammonium (NH_4) ····· To pass test
Heavy metals (as Pb) ····· To pass test
Substances reducing permanganate ····· To pass test
Residue after evaporation ····· Max 0.001%

Product No.	Packing	Price(₩)
1914	20ℓ	13,800
2621	200ℓ	Call

Water — HPLC

Meets ACS Specification
Ultraviolet Spectrophotometry
Maximum Absorbance
190nm ····· Max 0.01
200nm ····· Max 0.01
250-400 nm ····· Max 0.005
UV Cutoff ····· Max 190nm
LC Gradient suitability
Gradient Elution test ····· To pass test
Color (APHA) ····· Max 5
Residue after evaporation (at the time of packaging) ····· Max 10ppm
Conductance (uS/cm) ····· Max 2

Product No.	Packing	Price(₩)
119	4ℓ	15,000

Wijs' solution — CP

위이스 시액,위스 시액, Wijs reagent
● for determination of Iodine number

● Spec. density 11.05 g/cm³ ● Solub. in H_2O (20℃) Miscible ● pH value 2.4 ● Melting point 15~17℃ ● Boiling point 118.5℃

● IMDG UN N2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S.(ACETIC ACID), 8.3, II

Consumption of titrant ····· 38.0 ~ 39.5 ml/20ml
Sodium Thiosulfate solution ····· 0.1 mol/l

Product No.	Packing	Price(₩)
4081	500㎖	13,800
4082	2.5ℓ	47,500

W

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

X

Alphabetical list Numbers

List of X

Product	Page
Xylene cyanol FF	301
Xylene	301
D–Xylose	301

Xylene cyanol FF — Indicator

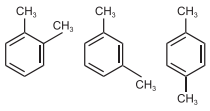
자일렌시아놀FF

● CAS No. 4463-44-9 ● $C_{25}H_{27}N_2NaO_7S_2$ ● FW 551.61

Appearance	Dark green to dark purple colored crystalline powder.
Insoluble substances	Max 0.5%
Insoluble dilute ethanol	Max 1.0%
Absorbance(5mg/l)	Min 0.5
Loss on drying (at.105℃,4hr.)	Max 5.0%
Sensitiveness	To pass test

Product No.	Packing	Price(₩)
118	25g	39,000

Xylene



자일렌, Dimethylbenzene

● CAS No. 1330-20-7 ● EC No. 215-535-7

● $C_6H_4(CH_3)_2$ ● FW 106.17

● Vapour pressure 10 hPa (20℃) ● Spec. density 0.86 g/cm³ (20℃) ● Explosive limit 1.0 – 7.0 Vol% ● Flash point 25℃ c.c. ● Solub. in H_2O 0.2 g/l (20℃) ● Saturation conc. 30 – 38g/m³ (20℃) ● Melting point > –34℃ ● Boiling point 137 – 143℃ ● Ignition temp. ~ 465℃ (DIN 51794)

● IMDG UN 1307 XYLENES, 3, III ● HS Code 2902 44 00 ● RTECS ZE2100000 ● 4류 제2석유류(비수용성 액체 1000ℓ) ● Merck Index 10, 9890

Xylene — EL

Assay	Min 99.5%
Color	Max 10APHA
Residue after evaporation	Max 5ppm
Acidity (as HCl)	Max 10ppm
Water	Max 0.02%
Chloride (Cl)	Max 3ppm
Phosphate (PO_4)	Max 0.5ppm
Aluminum (Al)	Max 50ppb
Arsenic (As)	Max 10ppb
Barium (Ba)	Max 20ppb
Boron (B)	Max 20ppb
Cadmium (Cd)	Max 20ppm
Calcium	Max 50
Chromium (Cr)	Max 50ppb
Cobalt (Co)	Max 20ppb
Copper (Cu)	Max 10ppb
Gallium (Ga)	Max 50ppb
Germanium (Ge)	Max 100ppb
Gold (Au)	Max 50ppb
Iron (Fe)	Max 50ppb
Lead (Pb)	Max 100ppb
Lithium (Li)	50ppb
Magnesium (Mg)	100ppb
Manganese (Mn)	50ppb
Nickel (Ni)	20ppb
Potassium (K)	20ppb
Silicon (Si)	10ppb
Silver (Ag)	100ppb
Sodium (Na)	200ppb
Strontium(Sr)	50ppb
Tin(Sn)	100ppb
Zinc (Zn)	20ppb
Particle Count (0.5 micron and above)	100pcs/ml

Product No.	Packing	Price(₩)
113	3.8ℓ	18,800

Xylene — Extra Pure

Appearance	Clear, colorless liquid with a sweet-smelling liquid.
Assay[C_8H_{10} isomeres (GC)]	Min 98.5%
Water	Max 0.03%
Residue after evaporation	Max 0.002%
Acidity (as HCl)	Max 0.002%
Alkalinity (as NaOH)	Max 0.002%
Sulfur Compounds (as S)	To pass test
Thiophene	To pass test
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
116	500㎖	3,800
115	1ℓ	6,300
117	18ℓ	50,000
2624	200ℓ	Call

Xylene — GR

Appearance	Clear, volatile liquid.
Assay (by GC, C_8H_{10} isomeres)	Min 98.5%
Water	Max 0.03%
Residue after evaporation	Max 0.002
Acidity (as HCl)	Max 0.001%
Alkalinity (as NaOH)	Max 0.001%
Sulfur Compounds (as S)	To pass test
Thiophene	To pass test
Substances darkened by sulfuric acid	To pass test

Product No.	Packing	Price(₩)
112	500㎖	10,500
4341	2.5ℓ	15,000
3458	3.8ℓ	20,000

D-Xylose — Extra Pure

D-자일로스

● CAS No. 58-86-6 ● $C_5H_{10}O_5$ ● FW 150.13

● Melting point 150 – 158℃ ● Specific rotati $[\alpha]_D^{20}$ +18.5° (C=10, H_2O, 20℃)

Product No.	Packing	Price(₩)
2626	25g	5,500
2627	500g	21,000

X

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

Y

Alphabetical list Numbers

List of Y

Product	Page
Yeast Dried	305

Yeast Dried CP

건조효모

Appearance ····· Light yellowish white to brown colored powder.
Loss on drying ····· Max 8.0%
Starch ····· To pass test
Ignition residue ····· Max 9.0%
Assay ····· Min 40.0%

Product No.	Packing	Price(₩)
108	500g	17,300

Duksan

Reagents & Chemicals

Alphabetical product list, Specification & Its prices

Z

Alphabetical list Numbers

List of Z

Product	Page
Zinc, Powder	309
Zinc Acetate dihydrate	309
Zinc Carbonate, basic	309
Zinc Chloride	309
Zinc Cyanide	309
Zinc Nitrate Hexahydrate	309
Zinc Oxide	310
Zinc Phosphate Tetrahydrate	310
Zinc Stearate	310
Zinc Sulfate Heptahydrate	310
Zirconium (IV) oxide 98.5%	310

Zinc, powder — Extra Pure

● CAS No. 7440-66-6 ● EC No. 231-175-3
● Zn ● FW 65.37

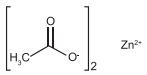
● Vapour pressure 1.33 hPa (487℃) ● Spec. density 7.14 g/cm³ (20℃) ● Solub. in H_2O (20℃)(reaction) ● Melting point 420℃ ● Bulk density 1800~2700 kg/m³ ● Boiling point 908℃

● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC POWDER STABILIZED), 9, III
● HS Code 7903 10 00 ● RTECS ZG8600000
● 2류 금속분 500kg ● Merck Index 10, 9925

Appearance ····· Bluish white colored metal, powder.
Assay ····· Min 85.0%

Product No.	Packing	Price(₩)
2650	500g	8,800

Zinc Acetate dihydrate — Extra Pure



아세트산아연
● CAS No. 5970-45-6 ● EC No. 209-170-2
● $Zn(CH_3CoO)_2 \cdot 2H_2O$ ● FW 219.50

● Spec. density 1.74 g/cm³ (20℃) ● M = 219.49 g/mol ● pH value 6 – 7 (50g/l, H_2O, 20℃) ● Melting point 237℃ ● Bulk density ~ 900 kg/m³

● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC ACETATE), 9, III, Segregation Group: 7 (heavy metals and their salts (including their organometallic compounds))
● HS Code 2915 29 00 ● RTECS ZG8750000 ● Merck Index 10, 9926

Appearance ····· Colorless crystal or white crystalline powder.
Assay ····· Min 98.0%
Solubility in dil. Acetic acid ····· To pass test
Chloride (Cl) ····· Max 0.005%
Nitrate (NO_3) ····· To pass test
Sulfate (SO_4) ····· Max 0.005%
Lead (Pb) ····· Max 0.005%
Iron (Fe) ····· Max 0.005%

Product No.	Packing	Price(₩)
2630	1kg	16,900
2632	25kg	237,500

Zinc Carbonate, basic

탄산아연
● CAS No. 12122-17-7 ●
● $2ZnCO_3 \cdot 3Z(OH)_2 \cdot H_2O$ ● FW 567.03

Zinc Carbonate, basic — Extra Pure

Product No.	Packing	Price(₩)
5650	500g	Call

Zinc Carbonate, basic — CP

Product No.	Packing	Price(₩)
2635	500g	21,000

Zinc Chloride — Extra Pure

염화아연
● CAS No. 7646-85-7 ● EC No. 231-592-0
● $ZnCl_2$ ● FW 136.29

● Vapour pressure 1.33 hPa (428℃) ● Spec. density 2.91 g/cm³ (25℃) ● Solub. in H_2O 4320 g/l (25℃) ● pH value ~5 (100 g/l, H2O, 20℃) ● Melting point 283℃ ● Bulk density ~ 1400 – 1800 kg/m³ ● Boiling point 732℃ (1013 hPa)

● IMDG UN 2331 ZINKCHLORID, ANHYDROUS, 8, III
● HS Code 2827 39 85 ● RTECS ZH1400000 ● Merck Index 10, 9932

Appearance ····· White crystalline powder, Hygroscopic.
Assay ····· Min 98.0%
Solubility in dil. HCl ····· To pass test
Basic salt (ZnO) ····· Max 2.4%
Sulfate (SO_4) ····· Max 0.01%
Total Nitrogen (as N) ····· Max 0.02%
Lead (Pb) ····· Max 0.01%
Iron (Fe) ····· Max 0.004%

Product No.	Packing	Price(₩)
2638	500g	5,600
2639	25kg	187,500

Zinc Cyanide

사이안화아연
● CAS No. 557-21-1 ● $Zn(CN)_2$ ● FW 117.42

Appearance ····· Off-white powder.
Assay ····· Min 95.0%
Lead (Pb) ····· Max 0.005%
Iron (Fe) ····· Max 0.05%
Cadmium(Cd) ····· Max 0.01%
Copper(Cu) ····· Max 0.05%

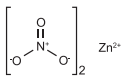
Zinc Cyanide — CP

Product No.	Packing	Price(₩)
2640	500g	20,000

Zinc Cyanide — Extra Pure

Product No.	Packing	Price(₩)
5649	500g	Call

Zinc Nitrate Hexahydrate — Extra Pure



질산아연, Nitric acid zinc salt hexahydrate
● CAS No. 10196-18-6 ● EC No. 231-943-8
● $Zn(NO_3)_2$ * 6 H_2O $Zn(NO_3)_2 \cdot 6H_2O$
● FW 297.46

● Spec. density 2.06g/cm³ (20℃) ● Solub. in H_2O 1843 g/l (20℃) ● pH value 5.1 (50 g/l, H_2O, 20℃) ● Melting point ~ 36℃

● IMDG UN 1514 ZINC NITRATE, 5.1, II
● HS Code 2834 29 80 ● Merck Index 10, 9946

Appearance ····· Colorless or white crystal, deliquescent.
Assay ····· Min 95.0%
Solubility in water ····· To pass test
pH (10% Sol.) ····· 3.5 ~ 5.4
Chloride (Cl) ····· Max 0.005%
Sulfate (SO_4) ····· Max 0.02%
Lead (Pb) ····· Max 0.01%
Iron (Fe) ····· Max 0.001%
Ammonium (NH_4) ····· Max 0.03%
Substances not precipitated by (NH_4)2S(as SO_4) ····· Max 0.5%

Product No.	Packing	Price(₩)
2644	500g	8,800
2643	25kg	343,800

Z

Zinc Oxide — Extra Pure

산화아연

● CAS No. 1314-13-2 ● EC No. 215-222-5
● ZnO ● FW 81.38

● Vapour pressure (20℃) low ● Spec. density 5.61 g/cm³ (20℃) ● Solub. in H_2O 0.0016 g/l(29℃) ● pH value ~7 (50 g/l, H_2O, 20℃) (slurry) ● Melting point 1975℃ ● Bulk density ~200 – 700 kg/m³

● IMDG UN 3077 ENVIROMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE), 9, III, Segregation Group: 7 (Heavy metals and their salts (including their organometallic compounds))
● HS Code 2817 00 00 ● RTECS ZH4810000 ● Merck Index 10, 9952

Appearance ····· White powder.
Assay ····· Min 99.0%
Solubility in dil. Acetic acid ····· To pass test
Loss on ignition ····· Max 1.0%
Chloride (Cl) ····· Max 0.005%
Nitrate (NO_3) ····· To pass test
Sulfur compound(as SO_4) ····· Max 0.03%
Lead (Pb) ····· Max 0.02%
Arsenic (As) ····· Max 3ppm
Iron (Fe) ····· Max 0.002%

Product No.	Packing	Price(₩)
2647	500g	8,800
1645	20kg	150,000

Zinc Phosphate Tetrahydrate — Extra Pure

인산아연

● CAS No. 7543-51-3
● $Zn_3(PO_4)_2 \cdot 4H_2O$ ● FW 458.17

Product No.	Packing	Price(₩)
74	500g	12,500

Zinc Stearate — Extra Pure

스테아린산아연

● CAS No. 557-05-1 ● $Zn(C_{18}H_{35}O_2)_2$ ● FW 632.23

Appearance ····· White fine & bulky powder.
Assay (as ZnO) ····· 10 ~ 12.5%
Free fatty acid ····· To pass test
Alkalies and other Alkaline earths ····· Max 1.0%
Heavy metals (as Pb) ····· Max 0.002%
Arsenic (As) ····· Max 2ppm
Loss on drying ····· Max 1.0%

Product No.	Packing	Price(₩)
2839	400g	10,000

Zinc Sulfate Heptahydrate — Extra Pure

황산아연, Zinc vitriol

● CAS No. 7446-20-0 ● EC No. 231-793-3
● $ZnSO_4 \cdot 7H_2O$ ● FW 287.55

● Spec. density 1.97 g/cm³ (20℃) ● Solub. in H_2O 965 g/l(20℃) ● pH value ~4 – 6 (50 g/l, H_2O, 20℃) ● Melting point 100℃ ● Bulk density ~ 800 – 1000 kg/m³

● IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC ACETATE), 9, III, Segregation Group: 7 (heavy metals and their salts (including their organometallic compounds))
● HS Code 2833 29 20 ● RTECS ZH5300000 ● Merck Index 10, 9966

Appearance ····· White crystal or crystalline powder.
Assay ····· Min 99.0%
Solubility in water ····· To pass test
pH (5 %, 25℃) ····· 4.4 ~ 6.0
Chloride (Cl) ····· Max 50ppm
Lead (Pb) ····· Max 0.003%
Iron (Fe) ····· Max 0.004%

Product No.	Packing	Price(₩)
34	500g	7,000
54	25kg	122,500

Zirconium (IV) oxide 98.5% — ACS

산화지르코늄

● CAS No. 1314-23-4
● ZrO_2 ● FW 123.22

Product No.	Packing	Price(₩)
53	500g	56,300

Tables and Data

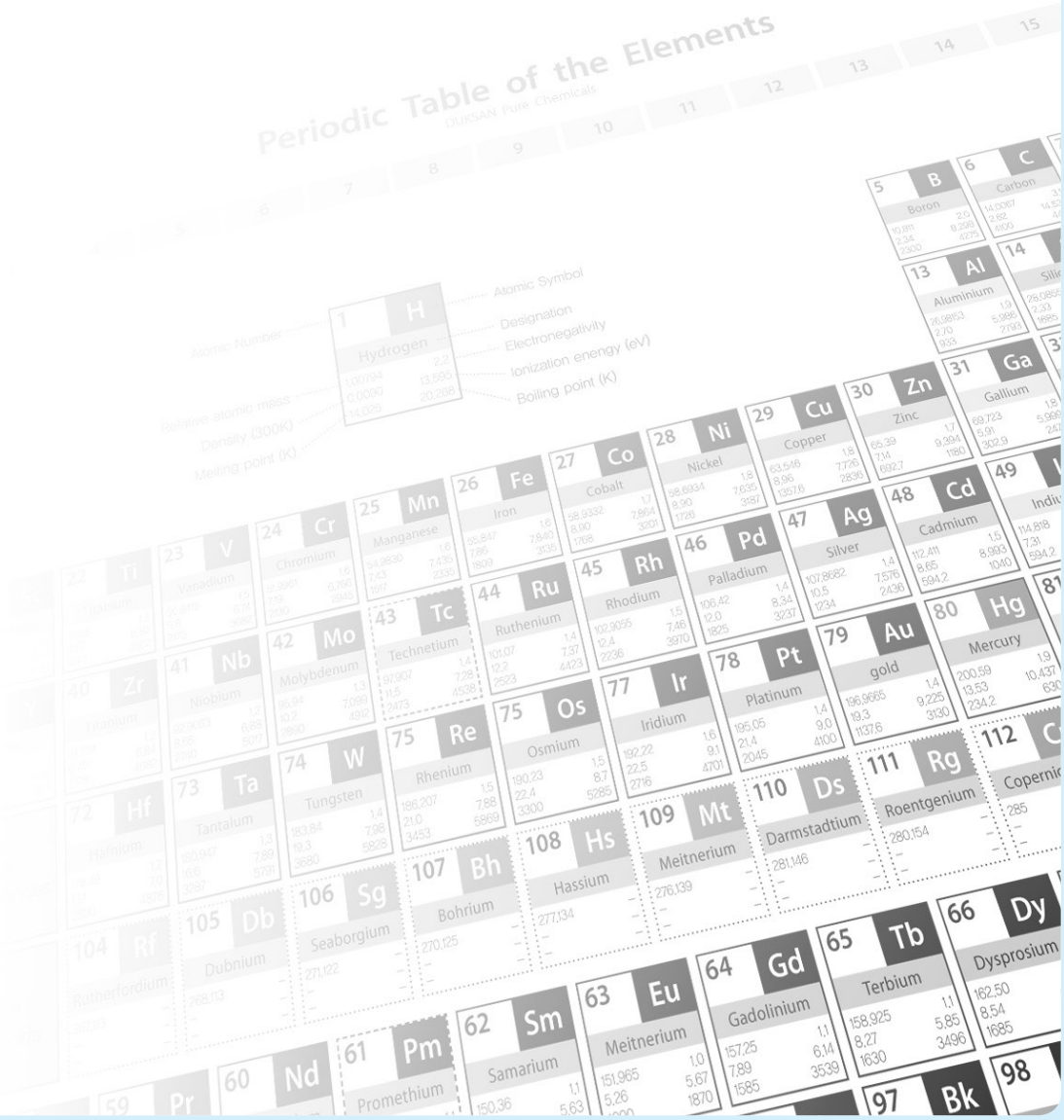
Synonyms

Typical Solvent Physical propertie

Solvent Chart & Unit

Synonyms

Korean



Synonyms

Korea

Synonym(Kor)	Catalogue Name	Page
가성소다	Sodium Hydroxide	254
개미산	Formic acid	141
건조효모	Yeast Dried	305
D-과당	D-(-)-Fructose	141
과망간산칼륨	Potassium Permanganate	229
과붕산나트륨	Sodium Perborate tetrahydrate	259
과산화바륨	Barium Peroxide	74
과산화수소	Hydrogen Peroxide 30%	156
과염소산	Perchloric Acid 60%	216
과탄산나트륨	Sodium Percarbonate	259
과황산나트륨	Sodium Persulfate	259
과황산암모늄	Ammonium Persulfate	65
과황산칼륨	Potassium Persulfate	230
광명단(사산화납)	Lead(II, IV) Oxide, Red	175
구연산	citric Acid monohydrate	102
구연산 칼륨	Potassium Citrate monohydrate	225
구연산나트륨	Sodium Citrate tribasic dihydrate	253
구연산칼슘(시트르산칼슘)	Calcium Citrate tetrahydrate	93
구연산제이철암모늄	Ammonium Iron(III) Citrate, brown	64
규불화나트륨(헥사플루오르 규산나트륨)	Sodium Silicofluoride	262
규산에틸	Tetraethyl o-silicate	275
규산나트륨	Sodium Silicate powder	261
글루콘산칼슘	Calcium Gluconate	94
글리세로인산칼슘	Calcium Glycerophosphate	94
낙산	Butyric Acid	86
노말-아밀알콜	n-Amyl Alchol	67
노말헥세인	n-Hexane	152
동, 분말	Copper, Powder	104
동녹유	Methyl Salicylate	195
라우릴황산나트륨	Sodium Lauryl Sulfate	257
로당칼륨	Potassium Thiocyanate	231
망초	Sodium Sulfate decahydrate	263
메타아크릴산뷰틸	Butyl Methacrylate monomer	86
메탄올	Methyl Alcohol	187
메틸셀로솔브	Ethylene Glycol monomethyl ether	135
몰리브덴산암모늄	Ammonium Molybdate tetrahydrate	65
무수 구연산	Citric Acid anhydrous	102
무수붕산(삼산화붕소)	Boron trioxide	80
무수인산	Phosphorus Pentoxide	220
무수크롬산	Chromium trioxide	101
물유리	Sodium Silicate Solution	262
밀납	Bees Wax White	75
밀크카세인	Caseine from Milk	97
바이플루오르화 암모늄	Ammonium Bifluoride	62
벤젠	Benzene	76
벤조트리아졸	1,2,3-Benzotriazol	77
벤즈알데히드	Benzaldehyde	75
벤질알콜	Benzyl Alcohol	78

Synonym(Kor)	Catalogue Name	Page
벤토나이트	Bentonite	75
불산	Hydrofluoric acid	155
붕사	Borax	79
붕산	Boric acid	80
1,4-뷰테인디올	1,4-Butanediol	83
뷰틸셀로솔브	Ethylene Glycol monobutyl ether	134
tert-뷰틸아민	tert-Butylamine	85
뷰틸알콜	n-Butyl Alcohol	84
sec-뷰틸알콜	sec-Butyl Alcohol	84
뷰틸캐비톨	Butyl Carbitol	85
뷰틸캐비톨 아세테이트	Butyl Carbitol Acetate	86
뷰틸파라벤	Butyl Paraben	86
브로모크레졸그린	Bromocresol green	80
브로모티몰블루	Bromothymol blue	81
브로모티몰블루 용액	Bromothymol blue solution	81
브로모페놀블루	Bromophenol blue	81
브로민산칼륨	Potassium Bromate	224
브로민화칼륨	Potassium Bromide	224
브롬화암모늄	Ammonium Bromide	63
브릴리안트 그린	Brilliant green	80
비등석	Boiling Stone	79
비스페놀 A	Bisphenol-A	79
비타민 C	L-Ascorbic Acid	69
빙정석	Cryolite	107
빙초산	Acetic Acid, glacial	52
사과산	DL-Malic acid	182
사산화삼철	Iron(II, III) Oxide black	162
사염화에틸렌	Perchloroethylene	216
사이클로핵세인	Cyclohexane	108
사이클로헥세인온	Cyclohexanone	108
산성백토	Clay Acid	102
산화알루미늄, 입상	Aluminium Oxide activated granule	60
산화제2철	Ferric Oxide red	139
산화제2크로뮴	Chromium(III) Oxide	101
산화제이동	Copper(II) Oxide	106
산화제이석	Stannic Oxide	266
산화제일동	Cuprous Oxide	107
산화카드뮴	Cadmium Oxide	92
산화칼슘(생석회)	Calcium Oxide	95
산화코발트	Cobalt(II,III) Oxide	104
살리실산나트륨	Sodium Salicylate	261
삼산화비스무트	Bismuth trioxide	79
삼산화안티모니	Antimony Trioxide	68
삼산화텅스텐	Tungsten (VI) Oxide	284
석산나트륨	Sodium Stannate trihydrate	262
석유에테르	Petroleum Ether (35°C~60°C)	216
석탄산	Phenol	217
설파닐산	Sulfanilic Acid	269

Synonyms

Korea

Synonym(Kor)	Catalogue Name	Page
설파믹산	Sulfamic Acid	269
설파믹산암모늄	Ammonium sulfamate	66
설포살리실산	5-Sulfosalicylic Acid dihydrate	269
세다유	Cedar Oil	97
세틸알콜	Cetyl Alcohol	98
셀라이트	Celite 545	97
솔빈산칼륨	Potassium Sorbate	231
수산	Oxalic Acid dihydrate	210
수산화나트륨	Sodium Hydroxide	254
수산화리튬	Lithium Hydroxide monohydrate	176
수산화마그네슘	Magnesium Hydroxide	180
수산화바륨	Barium Hydroxide octahydrate	74
수산화알루미늄	Aluminium Hydroxide	59
수산화칼륨	Potassium Hydroxide	227
수산화칼슘(소석회)	Calcium Hydroxide	94
수소화붕소나트륨	Sodium Borohydride	251
순염	Sodium Chloride	252
스테아린산납	Lead(II) Stearate	175
스테아린산 바륨	Barium Stearate	75
스테아린산뷰틸	Butyl Stearate	86
스테아린산칼슘	Calcium Stearate	96
시스테인염산	L-Cysteine Hydrochloride monohydrate	109
시트르산 12%	Citric Acid 12%	102
시트르산암모늄	Ammonium Citrate dibasic	63
싸이오사이안산동(I)	Copper(I) Thiocyanate	105
싸이오사이안산암모늄	Ammonium Thiocyanate	67
아닐린	Aniline	67
아닐린블루, 수용성	Aniline Blue water soluble	67
아디픽산	Adipic Acid	58
아디픽산암모늄	Ammonium Adipate	62
아라빅검	Arabic Gum powder	68
L-아르기닌	L-Arginine	69
아마인유	Linseed oil	176
아세토니트릴	Acetonitrile	55
아세토카민 용액	Acetocarmine Solution	54
아세톤	Acetone	54
아세트산	Acetic Acid, glacial	52
아세트산, 무수	Acetic Anhydride	53
아세트산동 1수화물	Copper(II) Acetate monohydrate	105
아세트산뷰틸	n-Butyl Acetate	83
아세트산암모늄	Ammonium Acetate	62
아세트산에틸	Ethyl Acetate	128
아세트산칼슘	Calcium Acetate monohydrate	92
아세트산코발트	Cobalt Acetate tetrahydrate	103
아세트아니라이드	Acetanilide	52
아셀렌산나트륨	Sodium Selenite	261
아스코르빈산나트륨	Sodium L-Ascorbate	249
아스코빅산(비타민C)	L-Ascorbic Acid	69

Synonym(Kor)	Catalogue Name	Page
아염소산나트륨	Sodium Chlorite	252
아오딘화동	Copper(I) Iodide	105
아이소뷰틸알콜	Iso-Butyl Alcohol	162
아이소아밀알콜	Iso-Amyl Alcohol	162
아이오딘	Iodine	161
아인산	Phosphonic acid	219
아인산	Phosphonic acid(Phosphorous acid)	220
아인산트리에틸	Triethyl Phosphite	283
아질산나트륨	Sodium Nitrite	258
아크릴로나이트릴	Acrylonitrile	57
아크릴산	Acrylic Acid	57
아크릴산뷰틸	Butyl Acrylate	84
아크릴아마이드	Acrylamide	57
아황산나트륨 무수	Sodium Sulfite anhydrous	263
아황산수소나트륨	Sodium Bisulfite	250
안식향산(벤조산)	Benzoic Acid	77
안식향산나트륨	Sodium Benzoate	250
안티모니, 분말	Antimony Powder	68
DL-알라닌	DL-Alanine	58
알루미늄, 분말	Aluminium Powder	60
알리자린레드 S용액	Allizaline Red S solution	58
알리자린옐로우 GG용액	Allizaline Yellow GG	59
암모늄 명반	Aluminium Ammonium Sulfate 12-water	59
암모니아수	Ammonia Water 28%	61
에탄올	Ethyl Alcohol 99.9%	129
에틸셀로솔브	Ethylene Glycol monoethyl ether	134
에틸셀로솔브아세테이트	Ethylene Glycol monoethyl ether Acetate	135
염기성 탄산코발트	Cobalt Carbonate basic	103
염산	Hydrochloric acid 37%	154
염소산나트륨	Sodium Chlorate	252
염소산칼륨	Potassium Chlorate	224
염화동(II)암모늄 2수화물	Copper(II) Diammonium Chloride dihydrate	105
염화리튬	Lithium Chloride anhydrous	176
염화마그네슘	Magnesium Chloride hexahydrate	180
염화메틸렌	Methylene Chloride	190
염화바륨	Barium Chloride dihydrate	74
염화벤질	Benzyl Chloride	78
염화벤질코늄(50%)	Benzalkonium Chloride 50%	75
염화세슘	Cesium Chloride	98
염화아세틸	Acetyl Chloride	56
염화안티모니	Antimony Trichloride	68
염화알루미늄	Aluminium Chloride, anhydrous	59
염화암모늄	Ammonium Chloride	63
염화은	Silver Chloride	248
염화제일동	Copper (I) Chloride	104
염화제2동	Copper(II) Chloride dihydrate	105
염화제2철, 무수	Ferric Chloride anhydrous	139
염화제일석	Stannous Chloride dihydrate	266

Synonyms

Korea

Synonym(Kor)	Catalogue Name	Page
염화제일철	Ferrous Chloride tetrahydrate	139
염화칼륨	Potassium Chloride	225
염화칼슘(건조용)	Calcium Chloride (for drying)	93
염화칼슘,2수염	Calcium Chloride dihydrate	93
염화코발트	Cobalt Chloride hexahydrate	103
오산화인	Phosphorus Pentoxide	220
오쏘규산나트륨	Sodium Orthosilicate	258
오쏘-이염화벤젠	o-Dichlorobenzene	114
옥살산암모늄	Ammonium Oxalate monohydrate	65
옥수수전분	Starch Corn	266
옥시염화인	Phosphorus Oxychloride	220
유당	Lactose monohydrate	173
유황	Sulfur powder	269
이산화규소	Silicon Dioxide	247
이산화타이타늄	Titanium Dioxide	278
이염화에틸렌	Ethylene Dichloride	133
이황화탄소	Carbon disulfide	97
인산	Phosphoric acid 85%	219
인산2수소나트륨	Sodium Phosphate monobasic anhydrous	260
인산2수소나트륨1수화물	Sodium Phosphate monobasic monohydrate	260
2인산	Pyrophosphoric acid	234
일산화납	Lead(II) Oxide (Litharge)	175
적인	Phosphorus Red	221
적혈염	Potassium Ferricyanide	226
젖산나트륨	Sodium Lactate 50% solution	257
젖산칼슘	Calcium Lactate	94
젖산칼슘	Lactic acid	173
제1인산 칼슘	Calcium Phosphate monobasic	95
제1인산암모늄	Ammonium Phosphate monobasic	66
제2인산 칼슘	Calcium Phosphate dibasic dihydrate	95
제2인산암모늄	Ammonium Phosphate dibasic	66
제3인산 칼슘	Calcium Phosphate tribasic	96
제삼인산나트륨	Sodium Phosphate tribasic 12-water	260
제삼인산칼륨	Potassium Phosphate tribasic	230
제이인산나트륨	Sodium Phosphate dibasic 12-water	259
제이인산칼륨	Potassium Phosphate dibasic	230
제일인산나트륨	Sodium Phosphate monobasic dihydrate	260
제일인산칼륨	Potassium Phosphate monobasic	230
주석, 분말	Tin Powder	278
주석산	DL-Tartaric Acid	275
L(+)- 주석산	L(+)-Tartaric Acid	275
주석산나트륨	Sodium Tartrate dihydrate	263
주석산칼륨	Potassium Tartrate hemihydrate	231
중아황산나트륨	Sodium Metabisulfite	257
중조, 중탄산나트륨	Sodium Bicarbonate	250
중주석산칼륨	Potassium Bitartrate	224
중크롬산나트륨	Sodium Dichromate dihydrate	253
중크롬산암모늄	Ammonium Dichromate	64

Synonym(Kor)	Catalogue Name	Page
중크롬산칼륨	Potassium Dichromate	226
중탄산암모늄	Ammonium Bicarbonate	62
중프탈산칼륨	Potassium Hydrogen Phthalate	227
중황산나트륨	Sodium Bisulfate monohydrate	250
질산	Nitric Acid	203
질산나트륨	Sodium Nitrate	258
질산마그네슘	Magnesium Nitrate hexahydrate	180
질산바륨	Barium Nitrate	74
질산비스무트	Bismuth(III) Nitrate pentahydrate	79
질산알루미늄	Aluminium Nitrate nonahydrate	59
질산암모늄	Ammonium Nitrate	65
질산은	Silver Nitrate	248
질산제2동	Copper(II) Nitrate trihydrate	106
질산제2철	Ferric Nitrate nonahydrate	139
질산카드뮴 사수화물	Cadmium Nitrate tetrahydrate	92
질산칼슘	Calcium Nitrate tetrahydrate	95
질산코발트	Cobalt Nitrate hexahydrate	103
질산크로뮴	Chromium Nitrate nonahydrate	101
질화붕소	Boron Nitride	80
차아염소산나트륨	Sodium Hypochlorite solution	256
차아염소산칼슘	Calcium Hypochlorite	94
차아인산나트륨	Sodium Phosphinate monohydrate	260
차아인산칼슘	Calcium Hypophosphite	94
차아황산나트륨(하이드로)	Sodium Hydrosulfite	254
철분	Iron Powder	162
청화동	Copper (I) Cyanide	104
초산마그네슘 4수화물	Magnesium Acetate tetrahydrate	180
카나다발삼	Canada Balsam	96
카민	Carmine	97
카페인	Caffeine anhydrous	92
카프릭산	n-Caprylic Acid	97
칼륨명반	Potassium Aluminium Sulfate	223
DL-캠퍼	DL-Camphor	96
크롬산나트륨	Sodium Chromate tetrahydrate	253
크롬산칼륨	Potassium Chromate	225
클로라민 T	Chloramine-T trihydrate	98
클로로폼	Chloroform	98
탄산나트륨	Sodium Carbonate anhydrous	251
탄산동, 염기성	Copper(II) Carbonate Basic	105
탄산리튬	Lithium Carbonate	176
탄산마그네슘	Magnesium Carbonate, basic light	180
탄산망가니즈	Manganese(II) Carbonate	183
탄산바륨	Barium Carbonate	74
탄산수소칼륨	Potassium Bicarbonate	223
탄산암모늄	Ammonium Carbonate	63
탄산칼륨	Potassium Carbonate anhydrous	224
탄산칼슘	Calcium Carbonate heavy	92
토주석	Antimony Potassium Tartrate hemihydrate	68

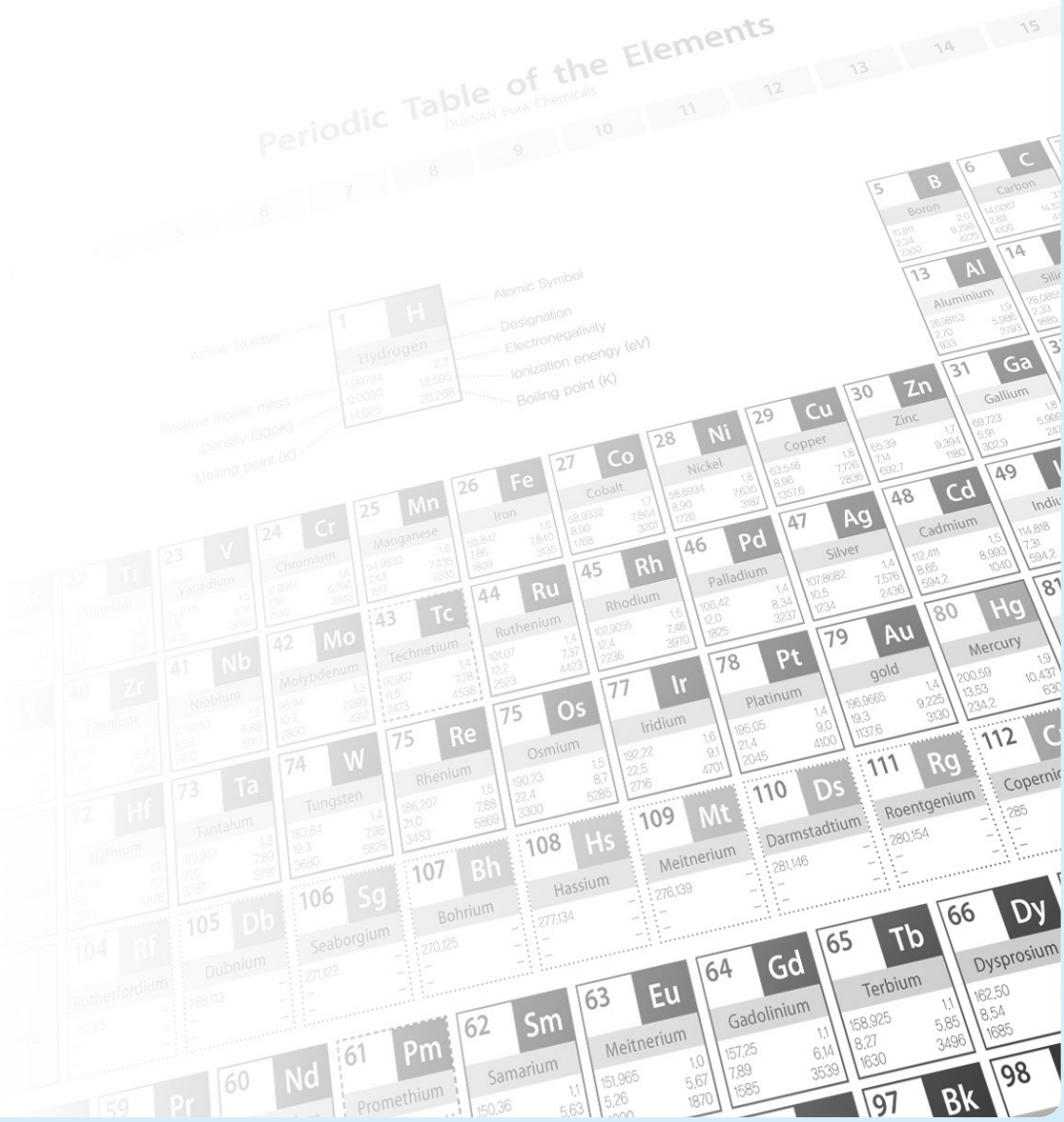
Synonyms

Korea

Synonym(Kor)	Catalogue Name	Page
트리스테아린산 알루미늄	Aluminium Tristearate	60
티오시안산나트륨	Sodium Thiocyanate	263
파라-이염화벤젠,	p-Dichlorobenzene	114
판토텐산칼슘	Calcium Pantothenate	95
페녹시에탄올	Ethylene Glycol monophenyl ether	135
포도당	Dextrose anhydrous	113
2-프로판올	Iso-Propyl Alcohol	164
플루오르화알루미늄	Aluminium Fluoride	59
플루오르화암모늄	Ammonium Fluoride	64
플루오르화칼슘	Calcium Fluoride	93
피로인산나트륨 무수	Sodium Pyrophosphate anhydrous	261
피로인산주석	Tin (II) Pyrophosphate	278
피로인산칼륨	Potassium Pyrophosphate	230
피마자유	Castor Oil	97
하이드라이드칼슘	Calcium Hydride	94
한천	Agar powder	58
해사	Sea Sand	246
호박산	Succinic Acid	268
호박산나트륨	Sodium Succinate hexahydrate	262
활성백토	Clay Activated	102
활성탄소	Activated Carbon	57
황산	Sulfuric Acid 95%	270
황산나트륨, 무수	Sodium Sulfate anhydrous	262
황산니켈암모늄	Ammonium Nickel(II) Sulfate hexahydrate	65
황산다이메틸	Dimethyl Sulfate	120
황산동	Copper(II) Sulfate Pentahydrate	106
황산바륨	Barium Sulfate	75
황산알루미늄	Aluminium Sulfate crystal 16~18water	60
황산암모늄	Ammonium Sulfate	66
황산제이철암모늄 12수화물	Ammonium Iron(III) Sulfate dodecahydrate	64
황산제일석	Stannous Sulfate	266
황산제일철7수화물	Ferrous Sulfate heptahydrate	140
황산제일철암모늄 6수화물	Ammonium Iron(II) Sulfate hexahydrate	64
황산카드뮴	Cadmium Sulfate hydrate	92
황산칼륨	Potassium Sulfate	231
황산칼슘	Calcium Sulfate Calcined	96
황산칼슘2수화물	Calcium sulfate dihydrate	96
황산코발트	Cobalt Sulfate heptahydrate	103
황혈염	Potassium Ferrocyanide	226
황화나트륨	Sodium sulfide hydrate	263
황화제일철	Ferrous Sulfide	140
흑연, 분말	Graphite powder	147

Typical

Solvent Physical properties



Typical Solvent Physical properties

Product	Polarity Index (Po)	Viscosity (cP, 25℃)	Density (g/ml,25℃)
Acetic acid, glacial	6.2	1.1	1.049
Acetone	5.1	0.306	0.785
Acetonitrile	5.8	0.369	0.779
Benzene		0.604	0.872
1-Butanol	3.9	2.544	0.806
n-Butyl acetate	4	0.685	0.876
Chlorobenzene	2.7		1.107
Chloroform	4.1	0.537	1.480
Cyclohexane	0.2	0.894	0.773
o-Dichlorobenzene		1.32	1.3058 [2]
1,2-Dichloroethane	3.5	0.779	1.245
Dichloromethane	3.1	0.413	1.318
N,N-Dimethyl Acetamide	6.5	2.14 [2]	0.937
N,N-Dimethylformamide	6.4	0.794	0.944
Dimethyl Sulfoxide	7.2	1.987	1.096
1,4-Dioxane	4.8	1.177	1.028
Ethanol	4.3	1.074	0.787
Ethyl Acetate	4.4	0.423	0.894
Ethyl Ether	2.8	0.24	0.708
n-Heptane	0.1	0.4	0.681
n-Hexane	0.1	0.3	0.656
Isooctane	0.1	0.51 [1]	0.691 [2]
Methanol	5.1	0.544	0.787
Methyl-t-Butyl Ether	2.5	0.28	0.740 [2]
Methyl Ethyl Ketone	4.7	0.38	0.799
Methyl Isobutyl Ketone	4.2	0.58	0.801 [2]
N-Methyl-2-Pyrrolidone	6.7	1.65	1.025
n-Pentane	0	0.22	0.621
Petroleum Ether (35~60℃)	0.1		0.64 [2]
1-Propanol	4	1.95	0.802
2-Propanol	3.9	2.038	0.782
Pyridine	5.3	0.88	0.978
Tetrahydrofuran	4	0.456	0.880
1,2,4-Trichlorobenzene			1.454 [2]
Toluene	2.4	0.56	0.864
Triethylamine			0.73 [2]
Water	10.2	0.89	0.998 [2]

1) measured at 22℃
2) measured at 20℃
3) solubility of water in solvent (%, 20℃)
4) miscible : two components can be mixed together in all portions without forming two separate phases
5) measured at 25℃

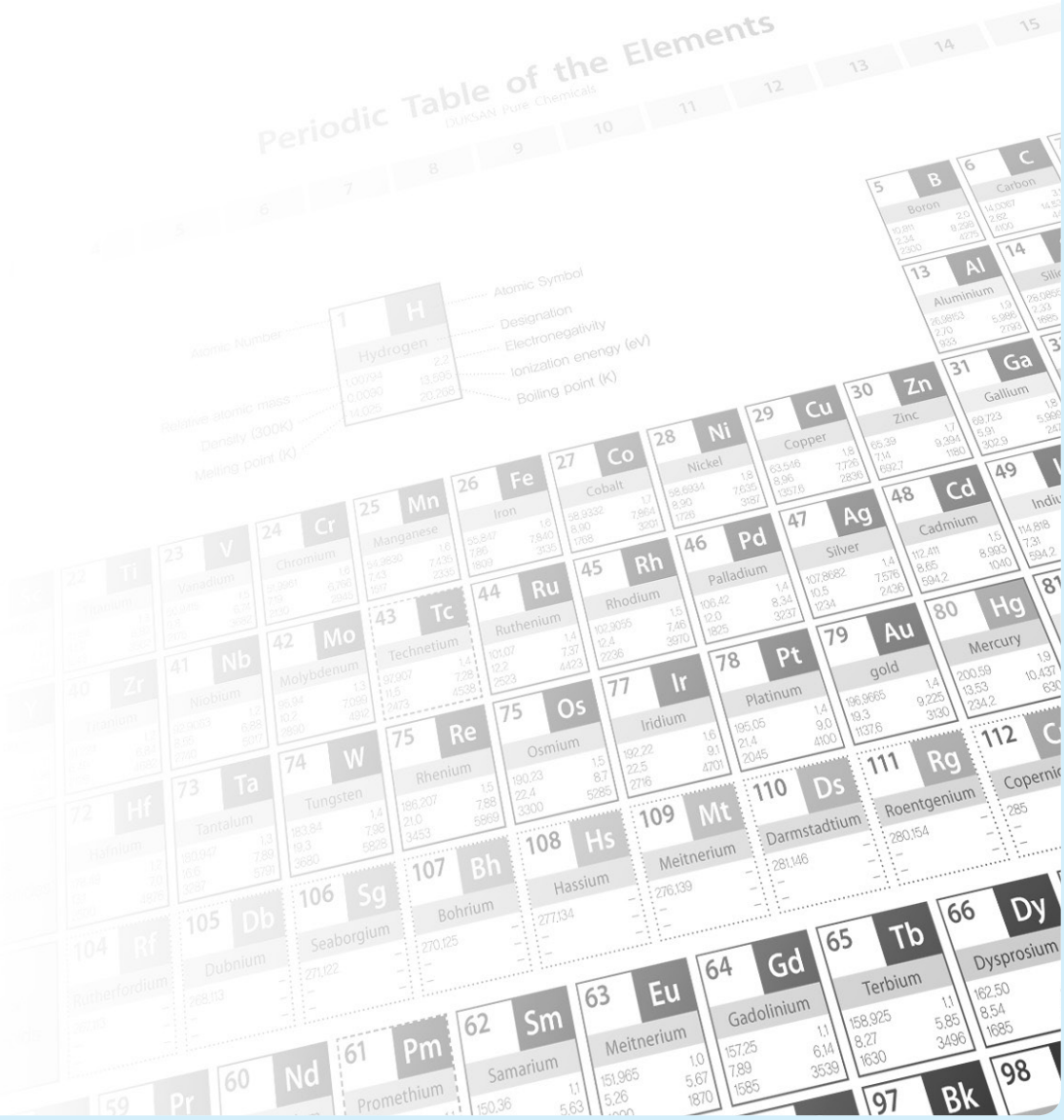
Solubility of water [3] (%, 20℃)	Refractive Index (25℃)	Boiling point (℃)	Freezing point (℃)
miscible [4]	1.370 [2]	117	16.5
miscible	1.357	56	−94.7
miscible	1.342	82	−43.8
0.063 [5]	1.498	80	5.5
20.07	1.397	118	−88.6
1.86	1.392	126	−73.5
	1.525 [2]	132	−45.6
0.056	1.444	61	−63.5
0.01	1.424	81	6.5
insoluble	1.5514 [2]	180.5	−17.0
0.15	1.444	84	−35
0.24	1.421	40	−95.1
miscible	1.4384 [2]	165~166	−20
miscible	1.427	153	−60.4
miscible	1.476	189	18.5
miscible	1.420	101	11.8
miscible	1.359	78	−114.1
3.3	1.370	77	−84
1.26	1.352	34	−117.4
0.01 [5]	1.385	98	−90.6
0.01	1.372	69	−95.3
0.006	1.389	99	−107.4
miscible	1.326	65	−97.7
1.5	1.366	55	−108.6
10	1.377	80	−86.7
	1.3957 [2]	117~118	−84
miscible	1.469	202	−24.4
0.009	1.355	36	−129.7
	1.365	35~60	
miscible	1.383	97	−126.2
miscible	1.375	82	−88.0
miscible	1.507	115	−41.5
miscible	1.404	65	−108.5
0.0025	1.5717 [2]	213.5	16.9
0.033 [5]	1.494	111	−95.0
		89.7	−114.7
	1.333 [2]	100	0

Solvent

Chart & Tables

Solvent Miscibility chart

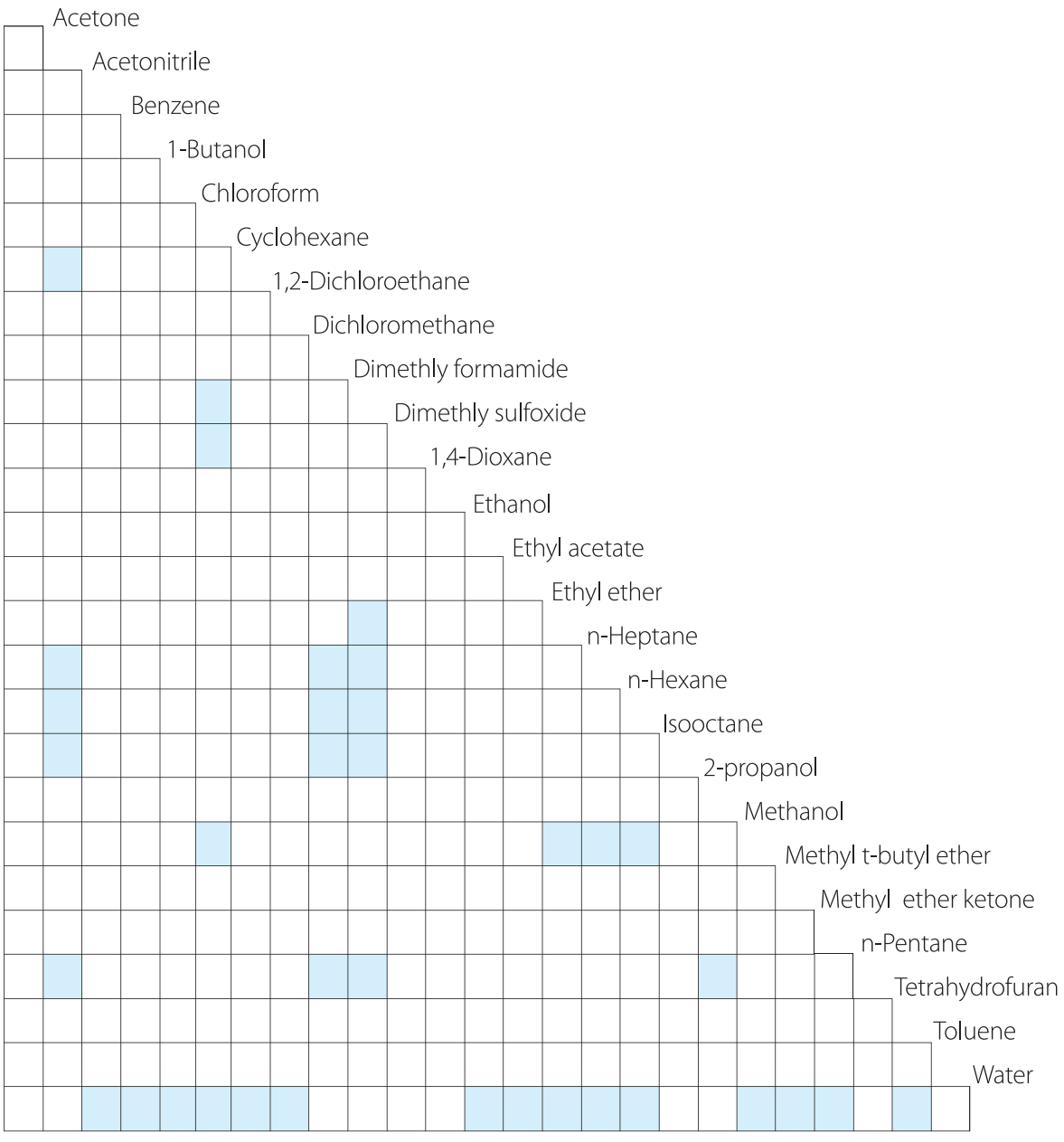
Units Conversion Tables



Solvent Miscibility chart

Miscible
Immiscible

Miscible : two components can be mixed together in all proportions without forming two separate phases



Units Conversion Tables

Units of Measure Conversion Factors

Percent	Parts per Million	Parts per Billion	Parts per Trillion
.001%=	10 ppm	-	-
.0001%=	1 ppm=	1,000 ppb=	1,000,000 ppt
.00001%=	.1 ppm=	100 ppb=	100,000 ppt
.000001%=	.01 ppm=	10 ppb=	10,000 ppt
-	.001 ppm=	1 ppb=	1,000 ppt
-	.0001 ppm=	.1 ppb=	100 ppt
-	-	.01 ppb=	10 ppt
-	-	.001 ppb=	1 ppt

Perfix	Factor	Fraction
centi	10^{-2}	1/100 (part per hundred)
milli	10^{-3}	1/1,000 (part per thousand)
micro	10^{-6}	1/1,000,000 (ppm, part per million)
nano	10^{-9}	1/1,000,000,000 (ppb, part per billion)
pico	10^{-12}	1/1,000,000,000,000 (ppt, part per trillion)
femto	10^{-15}	1/1,000,000,000,000,000 (ppq, part per quadrillion)
atto	10^{-18}	1/1,000,000,000,000,000,000 (part per quintillion)

Temperature Conversion Formulas

℃ to ℉	℉ to ℃
(℃×9/5)+32=℉	(℉−32)×5/9=℃

Weight Conversion Table[1]

From/To	g	kg	metiric ton	grain	oz	lb
g	1	0.001	1×10^{-6}	15.43	0.03527	0.00220
kg	1000	1	0.001	1.54×10^{4}	35.27	2.205
metric ton	1×10^{6}	1000	1	1.54×10^{7}	3.53×10^{4}	2205
grain	6.48×10^{-2}	6.48×10^{-5}	6.48×10^{-3}	1	2.29×10^{-3}	1.43×10^{-4}
oz	28.35	0.02835	2.83×10^{-5}	437.5	1	0.06250
lb	453.6	0.4536	4.54×10^{4}	7000	16	1

1.To convert from a unit shown in the left column, multiply by the factor listed in the column for the desired unit.

Volume Conversion Table[1] (metric and U.S.liquid measures)

From/To	cm^3	liter	m^3	in^3	ft^3	yd^3	fl oz	fl pt	fl qt	gal
cm^3	1	0.001	1×10^{-6}	0.06102	3.53×10^{-5}	1.31×10^{-6}	0.03381	0.00211	0.00106	2.64×10^{-4}
liter	1000	1	0.001	61.02	0.03532	0.00131	33.81	2.113	1.057	0.2642
m^3	1×10^{6}	1000	1	6.10×10^{4}	35.31	1.308	3.38×10^{4}	2113	1057	264.2
in^3	16.39	0.01639	1.64×10^{-5}	1	5.79×10^{-4}	2.14×10^{-5}	0.5541	0.03463	0.01732	0.00433
ft^3	2.83×10^{4}	28.32	0.02832	1728	1	0.03704	957.5	69.84	29.92	7.481
yd^3	7.65×10^{5}	764.5	0.7646	4.67×10^{4}	27	1	2.59×10^{4}	1616	807.9	202.0
fl oz	29.57	0.02957	2.96×10^{-5}	1.805	0.00104	3.87×10^{-5}	1	0.06250	0.03125	0.00781
fl pt	473.2	0.4732	473×10^{-4}	28.88	0.01671	619×10^{-4}	16	1	0.6000	0.1250
fl qt	946.4	0.9463	9.46×10^{-4}	57.75	0.03342	0.00124	32	2	1	0.2500
gal	3785	3.786	0.00379	231.0	0.1337	0.00495	128	8	4	1

1.To convert from a unit shown in the left column, multiply by the factor listed in the column for the desired unit.

Length Conversion Table[1]

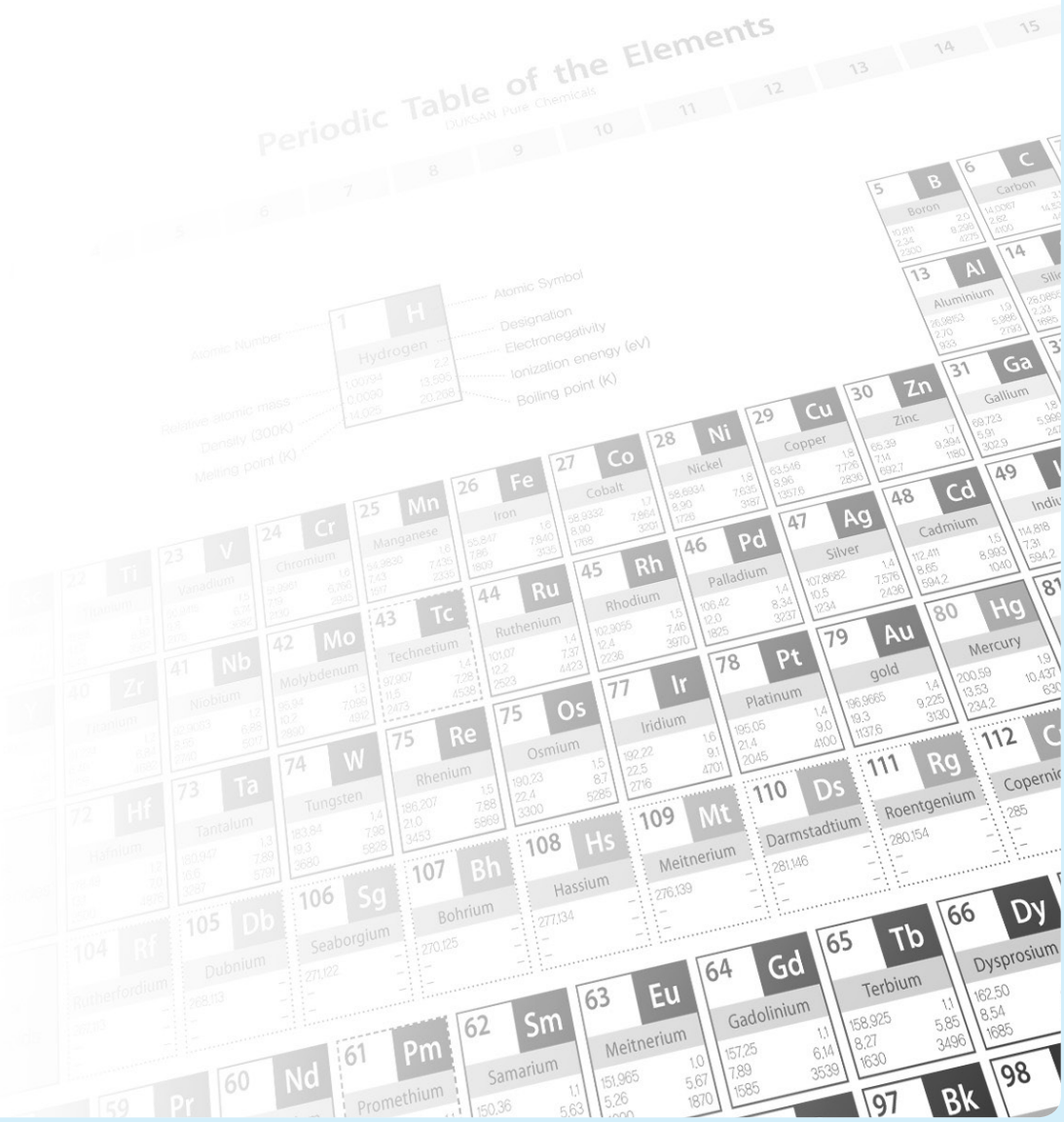
From/To	cm	m	km	in	ft	mile
cm	1	0.01	1×10^{-5}	0.3937	0.03281	6.214×10^{-6}
m	100	1	0.001	39.37	3.281	6.214×10^{-4}
km	1×10^{5}	1000	1	3.94×10^{4}	3281	0.6214
in	2.540	0.02540	2.540×10^{-5}	1	0.08333	1.578×10^{-5}
ft	30.48	0.3048	3.048×10^{-4}	12	1	18.94×10^{-4}
mile	1.609×10^{5}	1609	1.609	6.336×10^{4}	5280	1

1.To convert from a unit shown in the left column, multiply by the factor listed in the column for the desired unit.

Index

Alphabetical list Numbers
CAS Registry Numbers
Useful Data

Alphabetical
list Numbers



Alphabetical list Numbers

Products of DUKSAN

Product	Page
Acetanilide	52
Acetic Acid, glacial	52
Acetic acid 10%	53
Acetic acid 30%	53
Acetic acid ethyl ester	53
Acetic acid isopropyl ester	53
Acetic acid magnesium salt	53
Acetic acid methyl ester	53
Acetic acid n-butyl ester	53
Acetic acid sodium salt	53
Acetic Anhydride	53
Acetocarmine Solution	54
Acetone	54
Acetonitrile	55
Acetyl acetone	56
Acetyl Chloride	56
Acridine Orange	56
Acrylamide	57
Acrylic Acid	57
Acrylic acid 2-ethylhexyl ester	57
Acrylic acid butyl ester	57
Acrylic acid nitrile	57
Acrylonitrile	57
Activated Carbon	57
Adenine	57
Adipic Acid	58
Agar powder	58
DL-Alanine	58
L-Alanine	58
Alcian Blue 8GX	58
Alizarin	58
Alizarine Red S	58
Alizarin Red S solution	58
Alizarin Yellow GG indicator	59
Alizarin Yellow GG Indicator solution	59
Allyl Alcohol	59
Alum ammonium	59
Aluminium Ammonium Sulfate 12-water	59
Aluminium Chloride, anhydrous	59
Aluminium Fluoride	59
Aluminium Hydroxide	59
Aluminium Nitrate nonahydrate	59
Aluminium Oxide activated granule	60
Aluminium Oxide powder	60
Aluminium Powder	60
Aluminium Sulfate crystal 16~18water	60
Aluminum silicate hydrated	60
Aluminum trifluoride	60
Aluminium Tristearate	60

Product	Page
Amberlite IR-120	60
Amberlite IRA-410	60
Amidosulfonic acid ammonium salt	60
Amidosulfuric acid	60
Aminoacetic acid	60
4-Aminoantipyrine	60
Aminobenzene	61
4-Aminobenzenesulfonamide	61
4-Aminobenzenesulfonic acid	61
4-Aminobenzoic acid	61
p-Aminobenzoic acid	61
Aminocyclohexane	61
2-Aminoethanol	61
1-Amino-2-naphthol-4-sulfonic acid	61
N-(2-Aminoethyl) Ethanolamine	61
L-α-Aminoglutaric acid	61
4-Amino-3-hydroxy-1-naphthalenesulfonic acid	61
2-Amino-2-methylpropane	61
2-Aminophenol	61
α-Amino-β-phenyl propionic acid	61
DL-2-Aminopropanoic acid	61
Ammonia Water 28%	61
Ammonium Acetate	62
Ammonium Adipate	62
Ammonium Bicarbonate	62
Ammonium Bichromate	62
Ammonium Bifluoride	62
Ammonium biphosphate	63
Ammonium Bromide	63
Ammonium Carbonate	63
Ammonium Ceric Sulfate	63
Ammonium Cerium(IV) Sulfate dihydrate	63
Ammonium Chloride	63
Ammonium Citrate dibasic	63
Ammonium Dichromate	64
Ammonium dihydrogen Phosphate	64
Ammonium Fluoride	64
Ammonium hydrogen carbonate	64
Ammonium hydrogen Fluoride	64
Ammonium hydroxide solution	64
Ammonium Iron(Ⅲ) Citrate, brown	64
Ammonium Iron(Ⅲ) Sulfate dodecahydrate	64
Ammonium Iron(Ⅱ) Sulfate hexahydrate	64
Ammonium Metavanadate	64
Ammonium Molybdate tetrahydrate	65
Ammonium Nickel(Ⅱ) Sulfate hexahydrate	65
Ammonium Nitrate	65
Ammonium Oxalate monohydrate	65
Ammonium peroxodisulfate	65

Product	Page
Ammonium Persulfate	65
Ammonium Phosphate dibasic	66
Ammonium Phosphate monobasic	66
Ammonium Purpurate	66
Ammonium sulfamate	66
Ammonium Sulfate	66
Ammonium sulfocyanide	66
Ammonium (+)–Tartrate	66
Ammonium Thiocyanate	67
n–Amyl Alcohol	67
Aniline	67
Aniline Blue water soluble	67
Anisole	67
Anthracene	67
Anthrone	68
Antimony(Ⅲ) chloride	68
Antimony(Ⅲ) Oxide	68
Antimony potassium tartrate	68
Antimony Potassium Tartrate hemihydrate	68
Antimony Powder	68
Antimony Trichloride	68
Antimony Trioxide	68
Arabic Gum powder	68
L(+)–Arabinose	69
L–Arginine	69
L–Arginine Monohydrochloride	69
Arsenic Trioxide	69
Arsenic(Ⅲ) Oxide	69
L–Ascorbic Acid	69
L–Ascorbic Acid Sodium Salt	69
L(+)–Aspartic Acid	69
Balsam canada	74
Barium Carbonate	74
Barium Chloride dihydrate	74
Barium Dioxide	74
Barium diphenylamine Sulfonate	74
Barium diphenylamine–4–sulfonate	74
Barium Hydroxide octahydrate	74
Barium Nitrate	74
Barium Peroxide	74
Barium Stearate	75
Barium Sulfate	75
Basic Orange 14	75
Bees Wax White	75
Benedict's solution	75
Bentonite	75
Benzaldehyde	75
Benzalkonium Chloride 50%	75
Benzamide	76

Product	Page
Benzene	76
Benzethonium Chloride	76
1,2–Benzenedicarbonic acid anhydride	76
1,4–Benzenediol	76
Benzoic Acid	77
Benzoin	77
α–Benzoine oxime	77
Benzophenone	77
1,2,3–Benzotriazol	77
1H–Benzotriazole	77
6–Benzyl Adenine	77
6–Benzylaminopurine	77
Benzyl Alcohol	78
Benzyl Amine	64
Benzyl Chloride	78
40% Benzyl trimethyl ammonium Hydroxide Methanol solution	78
BHT	78
Biebrich Scarlet	78
2,2'–Bipyridyl	78
Bis(trimethylsilyl)amine	79
Bismarck Brown Y	79
Bismuth(Ⅲ) Nitrate pentahydrate	79
Bismuth trioxide	79
Bismuth(Ⅲ) oxide	79
Bisphenol–A	79
Bitter almond oil	79
Blanc fixe	79
Boiling Stone	79
Borax	79
Boric acid	80
Boric anhydride	80
Boron Nitride	80
Boron trioxide	80
Brilliant green	80
N/10–Bromine (0.05M)	80
Bromocresol green	80
Bromocresol Green solution	80
Bromocresol Green – Methyl Red solution	80
Bromocresol Purple	81
Bromocresol Purple solution	81
Bromophenol blue	81
Bromophenol Blue solution	81
Bromothymol blue	81
Bromothymol blue solution	81
Brucine	81
40% BTMAH Methanol solution	81
Buffer Solution Standard pH 2.00	81
Buffer Solution Standard pH 3.00	81
Buffer Solution pH4.01	82

Alphabetical list Numbers

Products of DUKSAN

Product	Page
Buffer Solution pH4.6	82
Buffer Solution pH5	82
Buffer Solution pH6	82
Buffer Solution pH6.86	82
Buffer Solution pH7.00	82
Buffer Solution pH9.18	82
Buffer Solution pH10.00	82
Buffer Solution pH11.00	82
Buffer Solution pH12.00	82
Buffer Solution pH13.00	82
Buffered Oxide Etchant 10:1	82
Buffered Oxide Etchant 6:1	82
Butanedioic acid	83
1,4–Butanediol	83
1–Butanol	83
2–Butanol	83
2–Butoxyethanol	83
n–Butyl Acetate	83
Butyl Acrylate	84
n–Butyl Alcohol	84
sec–Butyl Alcohol	84
tert–Butyl Alcohol	85
n–Butylamine	85
tert–Butyl Amine	85
Butyl Carbitol	85
Butylated Hydroxy Toluene	85
Butyl Carbitol Acetate	86
Butyl cellosolve	86
Butyl Methacrylate monomer	86
tert–Butyl methyl ether	86
Butyl octadecanoate	86
Butyl Paraben	86
Butyl Stearate	86
Butyl–4–hydroxybenzoate	86
N–Butyl–1–butanamine	86
1,4–Butylene glycol	86
Butyric Acid	86
gamma–Butyrolactone	87
Cadmium Acetate dihydrate	92
Cadmium Carbonate	92
Cadmium Nitrate tetrahydrate	92
Cadmium Oxide	92
Cadmium Sulfate hydrate	92
Caesium	92
Caffeine anhydrous	92
Calcium Acetate monohydrate	92
Calcium Carbonate heavy	92
Calcium Chloride (for drying)	93
Calcium Chloride anhydrous	93

Product	Page
Calcium Chloride dihydrate	93
Calcium Citrate tetrahydrate	93
Calcium dihydrogen phosphate monohydrate	93
Calcium Fluoride	93
Calcium Gluconate	94
Calcium Glycerophosphate	94
Calcium Hydride	94
Calcium hydrogen phosphate dihydrate	94
Calcium Hydroxide	94
Calcium Hypochlorite	94
Calcium Hypophosphite	94
Calcium Lactate	94
Calcium Nitrate tetrahydrate	95
Calcium octadecanoate	95
Calcium Oxide	95
Calcium Pantothenate	95
tri–Calcium phosphate	95
Calcium Phosphate dibasic dihydrate	95
Calcium Phosphate monobasic	95
Calcium Phosphate tribasic	96
Calcium Stearate	96
Calcium Sulfate Calcined	96
Calcium(II) citrate	96
Calcium sulfate dihydrate	96
DL–Camphor	96
Canada Balsam	96
n–Caprylic Acid	97
Carbamide	97
Carbon disulfide	97
Carbonic acid strontium salt	97
Carboxymethyl cellulose calcium salt	97
Carboxymethyl cellulose sodium Salt	97
Carmine	97
Caseine from Milk	97
Castor Oil	97
Cedar Oil	97
Celite 545	97
Ceric Sulfate	98
Cerium(III) Nitrate hexahydrate	98
Cerium(IV) sulphate	98
Cesium Chloride	98
Cetyl Alcohol	98
N–Cetyl–N,N,N Trimethyl Ammonium Bromide	98
Charcoal activated	98
Chloramine–T trihydrate	98
Chlorinated lime	98
Chloro calcium	98
Chloroacetic acid	98
2–Chloroethanol	98

Product	Page
Chloroform	98
1-Chloro-4-Nitrobenzene	100
4-Chlorophenol	100
p-Chlorophenol	100
Chlorophenol Red	100
N-Chlorosuccinimide	100
α-Chlorotoluene	100
Cholesterol	100
Choline Chloride	100
Chromium(Ⅲ) Chloride, hexahydrate	101
Chromium metal Powder	101
Chromium(Ⅲ) Nitrate nonahydrate	101
Chromium(Ⅲ) Oxide	101
Chromium(Ⅵ) oxide	101
Chromium trioxide	101
Chromotropic Acid Disodium salt	101
CI 11020	101
CI 13020	101
CI 13025	101
CI 14270	101
CI 14645	101
CI 22120	101
CI 26100	101
CI 42000	101
CI 42510	101
CI 42535	101
CI 42555	101
CI 45380	101
CI 50040	101
CI 52015	102
CI 73015	102
Citric Acid 12%	102
Citric Acid 50%	102
Citric Acid anhydrous	102
Citric Acid monohydrate	102
Clay Acid	102
Clay Activated	102
CMC Ca	102
CMC Na	102
Cobalt Acetate tetrahydrate	103
Cobalt Carbonate basic	103
Cobalt Chloride hexahydrate	103
Cobalt Nitrate hexahydrate	103
Cobalt Sulfate heptahydrate	103
Cobalt tetra oxide	103
Cobalt(Ⅱ) acetate tetrahydrate	103
Cobalt(Ⅱ) chloride hexahydrate	103
Cobalt(Ⅱ) Nitrate hexahydrate	103
Cobalt(Ⅱ) Sulfate heptahydrate	103

Product	Page
Cobalt(Ⅱ,Ⅲ) Oxide	104
Congo Red	104
Congo Red solution	104
Copper Powder	104
Copper (Ⅰ) Chloride	104
Copper (Ⅰ) Cyanide	104
Copper foil (0.1mm approx.)	104
Copper(Ⅱ) hydroxide carbonate	104
Copper(Ⅰ) Iodide	105
Copper(Ⅰ) Oxide	105
Copper(Ⅰ) Thiocyanate	105
Copper(Ⅱ) Acetate monohydrate	105
Copper(Ⅱ) Carbonate Basic	105
Copper(Ⅱ) Chloride dihydrate	105
Copper(Ⅱ) Diammonium Chloride dihydrate	105
Copper(Ⅱ) Nitrate trihydrate	106
Copper(Ⅱ) Oxide	106
Copper(Ⅱ) Sulfate anhydrous	106
Copper(Ⅱ) Sulfate Pentahydrate	106
Creatine Monohydrate	106
Creatinine	106
m-Cresol	106
m-Cresol Purple	107
m-Cresol Purple solution	107
Cresol Red	107
o-Cresolsulfophthalein	107
Cromic oxide	107
18-Crown-6-Ether	107
Cryolite	107
Crystal violet Acentic Acid Solution	107
CTMAB	107
Cupric oxide	107
Cupric acetate monohydrate	107
Cupric ammonium chloride dihydrate	107
Cupric chloride dihydrate	107
Cupric nitrate trihydrate	107
Cupric sulfate pentahydrate	107
Cuprous Chloride	107
Cuprous Cyanide	107
Cuprous iodide	107
Cuprous Oxide	107
Cuprous thiocyanate	107
Cyanoguanidine	107
Cyclohexane	108
Cyclohexanone	108
Cyclohexatriene	108
Cyclohexylamine	108
Cyclohexylmethane	109
L-Cysteine Hydrochloride monohydrate	109

Alphabetical list Numbers

Products of DUKSAN

Product	Page
Decahydronaphthalene	113
1–Decanol	113
Decyl Alcohol	113
Devardas Alloy	113
DEG	113
Dextrine	113
Dextrose anhydrous	113
Diacetone alcohol	113
1,2–Diaminoethane	113
Diammonium adipate	113
Diammonium hydrogen citrate	113
Diammonium (+)–Tartrate	113
Diamond green G	113
Diastase(fungal)	114
Dibutyl Phthalate	114
Dibutylamine	114
o–Dichlorobenzene	114
p–Dichlorobenzene	114
1,4–Dichlorobenzene	114
1,2–Dichloroethane	115
2,6–Dichloroindophenol Sodium salt	115
Dichloromethane	115
Dicyandiamide	115
N,N'–Dicyclohexylcarbodiimide	115
Diethanolamine	115
Diethylamine	115
Diethyl Ammonium–N,N–Diethyldithiocabamate	116
Diethyl Carbonate	116
Diethyl ether	116
Diethyl Phthalate	116
Diethyl Sulfate	116
Diethylene dioxide	116
Diethylene Glycol	116
Diethylene glycol dimethyl ether	116
Diethylene glycol monobutyl ether	117
Diethylene glycol monobutyl ether acetate	117
Diethylene glycol monoethyl ether	117
Diethylene glycol monoethyl ether acetate	117
Diethylene triamine	117
Diglyme	117
2,2–Dihydroxy–1,3–dioxohydrindene	117
1,2–Dihydroxyanthraquinone	117
1,3–Dihydroxybenzene	117
Diisopropyl ether	117
N,N–Diisopropylethylamine	117
1,2–Dimethoxyethane	117
N,N–Dimethyl Acetamide	117
p–Dimethylaminobenzaldehyde	118
2–Dimethylaminoethanol	118

Product	Page
4–Dimethylaminopyridine	118
N,N–Dimethylaniline	118
Dimethylbenzene	118
N,N–Dimethylethanolamine	118
Dimethyl Carbonate	118
N,N–Dimethyl Formamide	119
Dimethyl ketone	119
N,N–Dimethyl p–Phenylenediamine dihydrochloride	119
Dimethyl phthalate	119
1,3–Dimethyl propane	119
Dimethyl Sulfate	120
Dimethyl Sulfoxide	120
2,4–Dinitrophenol	120
2,4–Dinitrophenol solution	121
2,4–Dinitrophenyl hydrazine	121
3,5–Dinitirososalicylic acid	121
Dioctyl Phthalate	121
1,4–Dioxane	121
1,3–Dioxolane	122
Diphenylamine	122
Diphenylamine solution	122
1,5–Diphenylcarbazide	122
Diphenyl Carbazone	122
Diphenyl Ether	122
Diphosphoric acid	122
α,α'–Dipyridyl	122
Dipotassium hydrogen phosphate	122
Disodium Hydrogen Phosphate anhydrous	122
Disodium hydrogen phosphate dibasic 12–water	122
Disodium oxalate	122
Disodium succinate hexahydrate	122
DMAC	122
DMF	122
DMP	122
DMSO	122
Dodecanoic acid	122
Dodecyl alcohol	122
Dodecylbenzenesulphonic acid Sodium salt	123
DOP	123
Dotite–N,N Diluted with K_2SO_4	123
Drierite	123
EDA	127
EDIPA	127
EDTA	127
EDTA disodium calcium salt dihydrate	127
EDTA–FeNa trihydrate	127
EDTA–2Na dihydrate	127
M/100–EDTA–2Na	127
M/40–EDTA–2Na	127

Product	Page
M/20–EDTA–2Na	127
M/10–EDTA–2Na	127
M/5–EDTA–2Na	127
EDTA–4Na tetrahydrate	127
EG	127
Eosin Y	127
Epichlorohydrin	127
Eriochrome Black T	127
Eriochrome Black T solution	127
1,2–Ethanediol	127
2–Ethoxyethanol	127
2–Ethoxyethyl acetate	127
Ethyl Acetate	128
Ethyl Acetoacetate	129
Ethyl Acrylate monomer	129
Ethyl Alcohol 99.9%	129
Ethyl Alcohol 70~75% 합성(Synthetic)	130
Ethyl Alcohol 95% 합성,변성(Synthetic, Denatured)	130
Ethyl Alcohol 95% 발효(Fermented)	130
Ethyl Alcohol 99.5% 변성(Denatured)	130
Ethyl Alcohol 99.5% 발효무수 (Fermented anhydrous)	130
Ethyl Alcohol 합성무수 (Synthetic anhydrous)	130
Ethyl Alcohol 95% 소독용(Disinfection)	131
Ethyl Alcohol 합성함수 (식약청고시)	131
Ethyl Alcohol 합성함수 (Synthetic)	131
Ethyl Carbitol	131
Ethyl Carbitol Acetate	131
Ethyl Cellosolve	131
Ethyl Cellulose (18–22 cps)	131
Ethyl Chloroformate	132
N–Ethyldiisopropylamine	132
Ethyl Ether	132
2–Ethyl–1–Hexanol	133
2–Ethyl Hexyl Acrylate	133
Ethyl 4–hydroxy benzoate	133
Ethyl paraben	133
Ethyl phthalate	133
Ethylene carbonate	133
Ethylene Chlorohydrin	133
Ethylene Diamine	133
Ethylene Dichloride	133
Ethylene Glycol	134
Ethylene Glycol dimethyl Ether	134
Ethylene Glycol monobutyl ether	134
Ethylene Glycol monoethyl ether	134
Ethylene Glycol monoethyl ether Acetate	135
Ethylene Glycol monomethyl ether	135
Ethylene Glycol monophenyl ether	135
Ethylenediaminetetraacetic acid	135

Product	Page
Ethylenediaminetetraacetic acid Calcium Disodium salt hydrate	136
Ethylenediaminetetraacetic acid, monosodium Iron(Ⅲ) salt trihydrate	136
Ethylenediaminetetraacetic acid disodium salt dihydrate	136
Ethylenediaminetetraacetic acid tetrasodium salt tetrahydrate	136
N–Ethylethanamine	136
Ethyl Silicate28	136
Fehling Solution A	139
Fehling Solution B	139
Ferric ammonium citrate	139
Ferric ammonium sulfate	139
Ferric Chloride anhydrous	139
Ferric Chloride hexahydrate	139
Ferric Nitrate nonahydrate	139
Ferric Oxide red	139
Ferroin solution	139
Ferrous ammonium sulfate	139
Ferrous Chloride tetrahydrate	139
Ferrous Sulfate heptahydrate	140
Ferrous Sulfide	140
Fluorescein	140
Fluoroammonium	140
FluoroBoric acid	140
Formaldehyde solution	140
Formalin	140
Formamide	141
Formic acid	141
Formic acid amide	141
p–Formyldimethylaniline	141
D(–)–Fructose	141
Fuchsin Acid for Microscopy	141
Fuchsin Basic	141
Fuchsin Basic Solution	141
2–Furancarbaldehyde	141
Furfuryl Alcohol	142
2,5–Furanedione	142
Furfural	142
Gallic Acid monohydrate	145
Gelatin	145
Gentian Violet	145
Gibberellic Acid	145
Giemsa's Stain	145
Giemsa's Staining Solution	145
Glass Beads (3.5–4.5 mm)	145
Glass Wool	145
D–Gluconic acid calcium salt monohydrate	145
D(+)–Glucose	145
L–Glutamic Acid	146
L(+)–Glutamic Acid monosodium salt	146
L(+)–Glutamine	146

Alphabetical list Numbers

Products of DUKSAN

Product	Page
Glycerin	146
Glycerol	147
Glycerol Triacetate	147
Glycine	147
Glycolic Acid	147
Glycolmethacrylate	147
Glyoxaline	147
Gooch crucibles	147
Graphite powder	147
Guanidine Hydrochloride	148
Guar Gum	148
Hematoxylin Stain	151
n-Heptane	151
Hexadecanoic acid	151
1-Hexadecanol	151
Hexahydrobenzene	151
1,1,1,3,3,3-Hexamethyldisilazane	151
Hexanedioic acid	151
Hexanes	152
n-Hexane 95%	152
n-Hexane 98%	152
1-Hexane Sulfonic acid Sodium salt	153
Hexylene Glycol	153
Hippuric Acid	153
L-Histidine	153
L-Histidine monohydrochloride monohydrate	153
Hyamine 1622	153
Hydrazine hydrate	153
Hydrazine monohydrate	154
Hydrazine Sulfate	154
Hydrazinium Sulphate	154
Hydrochloric acid 37%	154
Hydrochloric Acid 10%	154
1N - Hydrochloric Acid (1M)	154
2N - Hydrochloric Acid (2M)	154
6N - Hydrochloric Acid (6M)	155
N/20 - Hydrochloric Acid (0.05M)	155
N/10-Hydrochloric Acid (0.1M)	155
N/10-Hydrochloric Acid (Ethanol Solution) (0.1M)	155
N/10-Hydrochloric Acid (2-Propanol Solution) (0.1M)	155
N/5 - Hydrochloric Acid (0.2M)	155
N/2 - Hydrochloric Acid (0.5M)	155
Hydrofluoric acid	155
Hydrogen Peroxide 30%	156
Hydroquinone	156
2-Hydroxy benzoic acid	156
2-Hydroxy Ethylmethacrylate	156
4-Hydroxy-3-methoxybenzaldehyde	156
Hydroxyacetic acid	156

Product	Page
o-Hydroxyaniline	156
2-Hydroxyethyl ether	156
Hydroxyl ammonium chloride	156
Hydroxylamine Hydrochloride	157
Hydroxylamine Sulfate	157
1-Hydroxynaphthalene	157
2-Hydroxynaphthalene	157
2-Hydroxypropanoic acid	157
3-Hydroxytoluene	157
Hydroxytricarballylic acid	157
8-Hydroxyquinoline	157
Hypophosphorous Acid	157
Imidazole	161
2,2-Iminodiethanol	161
Indigo Carmine 0.1% solution	161
Indole-3-Butyric Acid	161
3-Indolebutyric acid	161
myo-Inositol	161
Iodine	161
N/10 Iodine	161
Iron Powder	162
Iron(II) sulfate heptahydrate	162
Iron(II) sulfide	162
Iron(II,III) Oxide black	162
Iron(III) chloride anhydrous	162
Iron(III) nitrate nonahydrate	162
Iron(III) oxide	162
Iso-Amyl Alcohol	162
Iso-Butyl Alcohol	162
L(+)-Isoleucine	162
Iso-Octane	163
Iso-Octanol	163
Isopropanol	163
Iso-Propyl Acetate	163
Iso-Propyl Alcohol	164
Iso-Propyl Ether	165
Itaconic Acid	165
Kaoline	169
Karl-Fischer Reagent	169
Lacmoid	173
Lactic acid	173
Lactic acid calcium salt	173
Lactose monohydrate	173
Laevulose	173
Lanoline	173
Lanthanum Chloride heptahydrate	173
Lanthanum Nitrate hexahydrate	173
Lanthanum(III) nitrate hexahydrate	173
Lanthanum Oxide	173

Product	Page
Lanthanum(III) Oxide	173
Lauric acid	174
Lauryl Alcohol	174
Lead dichloride	174
Lead(II) Acetate trihydrate	174
Lead(II) Carbonate	174
Lead(II) Carbonate basic	174
Lead(II) Chloride	174
Lead(II) Chromate Precipitated	174
Lead(II) Nitrate	175
Lead(II) Octadecainoate	175
Lead(II) Oxide (Litharge)	175
Lead Powder	175
Lead(II, IV) Oxide, Red	175
Lead(II) Stearate	175
Lecithin	175
L-Leucine	175
Light Green for Microscopy	175
LIME	175
Linseed oil	176
Lithium Carbonate	176
Lithium Chloride anhydrous	176
Lithium Hydroxide monohydrate	176
Lithium Metal, Coated	176
Litmus Granular	176
L-Lysine monohydrochloride	176
Magnesium Acetate tetrahydrate	180
Magnesium Carbonate basic light	180
Magnesium carbonate hydroxide, light	180
Magnesium Chloride hexahydrate	180
Magnesium Fluoride	180
Magnesium Hydroxide	180
Magnesium Nitrate hexahydrate	180
Magnesium octadecanoate	180
Magnesium Oxide heavy	181
Magnesium Oxide light	181
Magnesium powder	181
Magnesium Stearate	181
Magnesium sulfate anhydrous	181
Magnesium Sulfate heptahydrate	181
Magnesium turnings	182
Malachite Green Oxalate	182
Maleic Anhydride	182
DL-Malic acid	182
Maltose monohydrate	182
Manganese Dioxide	182
Manganese Sulfate monohydrate	182
Manganese Sulfate pentahydrate	183
Manganese(IV) oxide	183

Product	Page
Manganese(II) Carbonate	183
Manganese(II) Chloride tetrahydrate	183
Manganese(II) Nitrate hexahydrate	183
D-Mannitol	183
MEK	183
Melamine	184
L-Menthol	184
Mercuric Thiocyanate	184
Mercurous Chloride	184
Mercury	184
Mercury(II) Acetate	184
Mercury(I) Chloride	184
Mercury(II) Chloride	184
Mercury(II) Iodide Red	184
Mercury(II) Nitrate monohydrate	185
Mercury(II) Sulfate	185
Mercury(II) Thiocyanate	185
Mesyl chloride	185
meta-Phosphoric Acid	185
Metanil Yellow	185
Methacrylic acid	185
Methacrylic acid butyl ester	185
Methanesulfonic Acid	185
Methanesulfonyl Chloride	185
Methanoic acid	186
Methanol	186
DL-Methionine	186
L-Methionine	186
Methoxybenzene	186
2-Methoxyethanol	186
2-Methoxyethyl Ether	186
1-Methoxy-2-Propanol	186
1-Methoxy-2-Propyl Acetate	186
Methyl Acetate	187
Methyl acetic acid	187
Methyl Acetoacetate	187
Methyl Acrylate monomer	187
Methyl Alcohol	187
Methyl Alcohol-Dried	189
Methylamine Solution 40%	189
4-Methylaminophenol sulfate	189
Methylbenzene	189
3-Methyl-1-butanol	189
Methyl tert-Butyl Ether	189
Methyl cellosolve	190
Methyl Cellulose (4000cps)	190
Methylchloroform	190
Methyl cyanide	190
Methyl Cyclohexane	190

Alphabetical list Numbers

Products of DUKSAN

Product	Page
Methylene Blue trihydrate	190
Methylene Chloride	190
Methyl Ethyl Ketone	191
Methyl 4-hydroxy benzoate	192
Methyl Isobutyl Ketone	192
Methyl Methacrylate	192
Methyl-2-methylpropenoate	192
n-Methyl Morpholine	192
Methyl Orange	193
Methyl Orange Solution	193
Methyl Orange xylene cyanol Solution	193
Methyl 3-oxobutanoate	193
Methyl Paraben	193
2-Methyl-2,4-pentanediol	193
2-Methyl-1-Propanol	193
Methyl propenoate	193
2-Methylpropenoic acid	193
N-Methyl-2-Pyrrolidone	193
1-Methyl-2-pyrrolidone	194
Methyl Red	194
Methyl Red Solution	194
Methyl Salicylate	195
7-Methyltheobromine	195
Methyl Violet 2B	195
Methyl Violet 2B Soution	195
Methyl Yellow	195
Methyl Yellow Soution	195
Metol	195
MIBK	195
Molecular sieve 13X	195
Molecular sieve 3A	195
Molecular sieve 4A	195
Molecular sieve 4A 4×8	195
Molecular sieve 5A	195
Molybdenum Disulfide	196
Molybdenum(VI) Oxide	196
Molybdenum(IV) sulfide	196
Molybdenum trioxide	196
Molybdic Acid 85%	196
12 Molybdo(VI) phosphoric Acid n-Hydrate	196
Monochloroacetic Acid	196
Monochlorobenzene	196
Monoethanolamine	197
Mononitromethane	197
Morpholine	197
MTBE	197
Murexide	197
Myristic Acid	197
Naphthalene	201

Product	Page
1-Naphthol	201
2-Naphthol	201
1-Naphthylacetic Acid	201
N-(1-Naphthyl)ethylenediamine dihydrochloride	201
Nessler's solution	201
Neutral red	201
Nickel Acetate tetrahydrate	202
Nickel Carbonate basic	202
Nickel Chloride hexahydrate	202
Nickel Oxide	202
Nickel Sulfamate tetrahydrate	202
Nickel Sulfate hexahydrate	202
Nickel(II) amidosulfate tetrahydrate	202
Nickel(II) Formate Dihydrate	202
Nickel(II) Nitrate hexahydrate	202
Nicotinamide	203
Nicotinic acid	203
Ninhydrine	203
Nitric Acid	203
Nitric Acid 70%	204
1N - Nitric Acid (1M)	204
N/10 - Nitric Acid (0.1M)	205
Nitric acid ammonia	205
Nitric acid potassium salt	205
Nitric acid sodium salt	205
o-Nitroaniline	205
2-Nitroaniline	205
Nitrilotriacetic Acid	205
4-Nitroaniline	205
Nitrobenzene	205
3-Nitrobenzaldehyde	205
p-Nitrochlorobenzene	205
Nitromethane	205
p-Nitrophenol	206
4-Nitrophenol	206
Nitroso-R-Salt	206
NMP	206
Octadecanoic acid	209
1-Octadecanol	209
cis-9-Octadecene-1-ol	209
cis-9-Octadecenoic acid	209
1-Octane Sulfonic acid Sodium salt	209
Octanoic acid	209
1-Octanol	209
N-Octyl alcohol	209
Oleic Acid	209
Oleyl Alcohol	209
Olive oil	209
Orange G	209

Product	Page
Orcein	209
Orthophosphoric acid	209
0.1N – Oxalic Acid (0.1M)	209
1N–Oxalic Acid (0.5M)	210
Oxalic acid ammonium salt	210
Oxalic Acid dihydrate	210
Oxalic acid dipotassium salt monohydrate	210
Palmitic acid	214
Paraffin (56–58℃)	214
Paraffin Liquid	214
Paraform	214
Paraformaldehyde	214
Paranaphthalene	214
Pectin	214
PEG 200	214
PEG 400	214
PEG 600	214
PEG 1500	214
PEG 4000	214
PEG 6000	214
PEG 8000	214
Pentaerythritol	215
n–Pentane	215
Pentane–2,4–dione	215
1–Pentanol	215
Pentasodium triphosphate	215
Peptone	215
Perchloric Acid 60%	216
Perchloric Acid 70%	216
N/10 – Perchloric Acid (0.1M)(Acetic acid solution)	216
Perchloroethylene	216
Permanganic acid potassium salt	216
Petroleum Benzine	216
Petroleum Ether(35~60℃)	216
Petroleum Ether(40~60℃)	217
1,10–Phenanthroline monohydrate	217
Phenol	217
Phenolphthalein	217
Phenolphthalein solution 0.1%	217
Phenolphthalein solution 1%	218
Phenol Red	218
Phenol Red Solution 0.1%	218
Phenolsulfophthalein	218
2–Phenoxy ethanol	218
Phenyl chloride	218
Phenyl Ether	218
Phenyl Hydrazine Hydrochloride	218
N–Phenylacetamide	218
L(–)–Phenylalanine	218

Product	Page
Phenylcarbinol	218
o–Phenylenediamine	218
p–Phenylenediamine	219
Phenylformic acid	219
2–Phenylol	219
o–Phenylphenol	219
Phloroglucinol	219
Phosphomolybdic acid	219
Phosphonic acid	219
Phosphoric acid 85%	219
Phosphoric acid 60%	220
Phosphoric acid tributyl ester	220
Phosphoric anhydride	220
Phosphorous Acid	220
Phosphorous Acid 40%	220
Phosphorous Acid 60%	220
Phosphorous(V) Oxide	220
Phosphorus Oxychloride	220
Phosphorus Pentoxide	220
Phosphorus Red	221
Phosphoryl Chloride	221
Phosphotungstic Acid	221
Phthalic acid dibutyl ester	221
Phthalic anhydride	221
Piperazine anhydrous	221
Polyethylene Glycol 200	221
Polyethylene Glycol 400	222
Polyethylene Glycol 600	222
Polyethylene Glycol 1500	222
Polyethylene Glycol 4000	222
Polyethylene Glycol 6000	222
Polyethylene Glycol 8000	222
Polyoxyethylene octylphenyl ether	222
Polyoxyethylene sorbitan monolaurate	222
Polyoxyethylene sorbitan monooleate	222
Polyoxyethylene sorbitan monopalmitate	222
Polyoxyethylene sorbitan monostearate	222
Polyphosphoric Acid	223
Polyvinyl Alcohol 500	223
PolyVinyl Alcohol 1500	223
Polyvinyl pyrrolidone	223
Potassium Acetate	223
Potassium Aluminium Sulfate	223
Potassium Bicarbonate	223
Potassium Biphthalate	224
Potassium Bitartrate	224
Potassium Bromate	224
N/10 – Potassium Bromate (1/60M)	224
Potassium Bromide	224

Alphabetical list Numbers

Products of DUKSAN

Product	Page
Potassium Carbonate Anhydrous	224
Potassium Chlorate	224
Potassium Chloride	225
3.3M–Potassium Chloride (3.3M)	225
N/10 – Potassium Chloride (0.1M)	225
Potassium Chromate	225
Potassium Citrate monohydrate	225
Potassium Cyanide	225
Potassium Dichromate	226
1N – Potassium Dichromate (1/6M)	226
N/10 – Potassium Dichromate (1/60M)	226
Potassium dihydrogen phosphate	226
Potassium diphosphate	226
Potassium Ferricyanide	226
Potassium Ferrocyanide	226
Potassium Fluoride	226
Potassium hexacyanoferrate(Ⅱ)	226
Potassium hexacyanoferrate(Ⅲ)	226
Potassium hydrogen carbonate	226
Potassium Hydrogen Phthalate	227
Potassium hydrogen tartrate	227
Potassium Hydroxide	227
Potassium Hydroxide 45%	227
Potassium Hydroxide 30% Solution	227
1N–Potassium Hydroxide (1M)	227
N/2 Potassium Hydroxide (0.5M)	228
N/10–Potassium Hydroxide (0.1M)	228
N/10–Potassium Hydroxide (Ethanol sol.)(0.1M)	228
Potassium Iodate	228
N/10 Potassium Iodate (1/60M)	228
Potassium Iodide	228
N/10 Potassium Iodide	228
Potassium Metabisulfite	228
Potassium Nitrate	229
Potassium Oxalate monohydrate	229
Potassium Permanganate	229
1N–Potassium Permanganate (0.2M)	229
N/2–Potassium Permanganate (0.1M)	229
N/5–Potassium Permanganate (0.04M)	229
N/10–Potassium Permanganate (0.02M)	229
N/40–Potassium Permanganate (0.005M)	229
Potassium peroxodisulfate	229
Potassium Persulfate	230
Potassium Phosphate dibasic	230
Potassium Phosphate monobasic	230
Potassium Phosphate tribasic	230
Potassium pyrochromate	230
Potassium Pyrophosphate	230
Potassium pyrosulfate	230

Product	Page
Potassium rhodanide	230
Potassium sodium tartrate tetrahydrate	230
Potassium Sorbate	231
Potassium Sulfate	231
Potassium Tartrate hemihydrate	231
Potassium Thiocyanate	231
Prethanol	231
Prethanol–A	231
Primelic ketone	231
L(–)–Proline	232
1,2–Propanediol	232
1–Propanol	232
2–Propanol	232
2–Propen–1–ol	232
2–Propenamide	232
2–Propenoic acid	232
Propionic acid	232
n–Propyl alcohol	233
Propyl Gallate	233
Propyl 4–hydroxybenzoate	233
Propyl Paraben	233
Propylene Glycol	233
Propylene Glycol Monomethyl Ether	233
Propylene Glycol Monomethyl Ether Acetate	233
PTSA	233
Propylene Glycol momomethyl ether	233
Propylene Glycol momomethyl ether Acetate	233
Pyridine	234
3–Pyridine carboxamide	234
Pyridine–3–carboxylic acid	234
Pyrogallol	234
Pyrophosphoric acid	234
2–Pyrrolidinone	234
2–Pyrrolidone	234
Quinoline	237
Resorcinol	241
Rhodamine B	241
Riboflavin	241
D(–)–Ribose	241
Rochelle Salt	241
Rongalite	241
Rosolic Acid Solution	241
Saccharose	246
Safranine O	246
Salicylic Acid	246
Salicylic acid sodium salt	246
Salicylsulfonic acid	246
Sanicine	246
Sea Sand	246

Product	Page
Selenium Dioxide	246
Selenium(Ⅳ) oxide	246
Sellaite	246
Selenium, powder	247
L-Serine	247
Silicagel Medium Granular (Blue)	247
Silicagel Medium Granular (White)	247
Silica Gel for Chromatography 60 70~230 mesh	247
Silica Gel for Chromatography 60 230~400 mesh	247
Silicon Dioxide	247
Silicone High Vacuum Grease	247
Silver Chloride	248
Silver Diethyldithiocarbamate	248
Silver Nitrate	248
1N – Silver Nitrate (1M)	248
N/10 – Silver Nitrate (0.1M)	248
N/20 – Silver Nitrate (0.05M)	248
N/100 – Silver Nitrate (0.01M)	248
Silver Sulfate	248
Soda caustic	248
Soda Lime	249
Sodium Acetate anhydrous	249
Sodium Acetate trihydrate	249
Sodium Alginate	249
Sodium Arsenite	249
Sodium L-Ascobate	249
Sodium Azide	250
Sodium Benzoate	250
Sodium Bicarbonate	250
Sodium bichromate	250
Sodium Bisulfate monohydrate	250
Sodium Bismuthate	250
Sodium Bisulfite	250
Sodium Borohydride	251
Sodium Bromate	251
Sodium Bromide	251
Sodium Carbonate anhydrous	251
1N-Sodium Carbonate (0.5M)	251
N10-Sodium Carbonate (0.05M)	251
Sodium Chlorate	252
Sodium Chloride	252
1N-Sodium Chloride (1M)	252
N/10-Sodium Chloride (0.1M)	252
N/100-Sodium Chloride (0.01M)	252
Sodium Chlorite	252
Sodium Chromate tetrahydrate	253
Sodium Citrate tribasic dihydrate	253
Sodium Cobaltnitrite	253
Sodium Cyanide	253

Product	Page
Sodium Dichromate dihydrate	253
Sodium N,N-diethyldithiocarbamate trihydrate	253
Sodium dihydrogen phosphate dihydrate	253
Sodium dihydrogenphosphate monohydrate	254
Sodium diphosphate anhydrous	254
Sodium disulfite	254
Sodium dithionite	254
Sodium dodecyl sulfate	254
Sodium Fluoride	254
Sodium formaldesulfoxylate hydrate	254
Sodium Gluconate	254
Sodium hexafluoro silicate	254
Sodium hexahydroxostannate	254
Sodium Hexametaphosphate	254
Sodium Hexanitrocobaltate(Ⅲ)	254
Sodium hydrogen carbonate	254
Sodium hydrogen sulfate monohydrate	254
Sodium hydrogen sulfite	254
Sodium Hydrosulfite	254
Sodium Hydroxide	254
Sodium Hydroxide 10%	255
Sodium Hydroxide 15%	255
Sodium Hydroxide 25%	255
Sodium Hydroxide 30%	255
Sodium Hydroxide 40%	255
Sodium Hydroxide 45%	255
Sodium Hydroxide 50%	256
5N – Sodium Hydroxide (5M)	256
2N – Sodium Hydroxide (2M)	256
1N – Sodium Hydroxide (1M)	256
N/2 – Sodium Hydroxide (0.5M)	256
N/5 – Sodium Hydroxide (0.2M)	256
N/10 – Sodium Hydroxide (0.1M)	256
N/20 – Sodium Hydroxide (0.05M)	256
N/40 – Sodium Hydroxide (0.025M)	256
Sodium Hypochlorite solution	256
Sodium hypophosphite monohydrate	256
Sodium Iodide	256
Sodium Lactate 50% solution	257
Sodium Lauryl Sulfate	257
Sodium Metabisulfite	257
Sodium, metal	257
Sodium Metasilicate nonahydrate	257
Sodium Methoxide 30% sodution in methanol	257
Sodium Molybdate dihydrate	258
Sodium Nitrate	258
Sodium Nitrite	258
Sodium nitroferricyanide dihydrate	258
Sodium Nitroprusside	258

Alphabetical list Numbers

Products of DUKSAN

Product	Page
Sodium octadecanoate	258
Sodium Orthosilicate	258
Sodium Oxalate	258
N/10 – Sodium Oxalate (0.05M)	259
N/40 – Sodium Oxalate (0.0125M)	259
Sodium Perborate tetrahydrate	259
Sodium Percarbonate	259
Sodium peroxidisulfate	259
Sodium peroxoborate tetrahydrate	259
Sodium Persulfate	259
Sodium Phosphate dibasic 12–water	259
Sodium Phosphate dibasic anhydrous	260
Sodium Phosphate dibasic dihydrate	260
Sodium Phosphate monobasic anhydrous	260
Sodium Phosphate monobasic dihydrate	260
Sodium Phosphate monobasic monohydrate	260
Sodium Phosphate tribasic 12–water	260
Sodium Phosphinate monohydrate	260
Sodium Pyrophosphate anhydrous	261
Sodium Pyrophosphate decahydrate	261
Sodium Pyruvate	261
Sodium Salicylate	261
Sodium Selenite	261
Sodium Silicate powder	261
Sodium Silicate Solution	262
Sodium Silicofluoride	262
Sodium Stannate trihydrate	262
Sodium Stearate	262
Sodium Succinate hexahydrate	262
Sodium Sulfate anhydrous	262
Sodium Sulfate decahydrate	263
Sodium sulfide hydrate	263
Sodium Sulfite anhydrous	263
di–Sodium tartrate dihydrate	263
Sodium Tartrate dihydrate	263
Sodium tetraborate	263
Sodium tetrahydroborate	263
Sodium Thiocyanate	263
N/10 – Sodium Thiocyanate (0.1M)	263
Sodium Thioglycollate 80%	264
Sodium Thiosulfate anhydrous	264
Sodium Thiosulfate pentahydrate	264
N/10 – Sodium Thiosulfate (0.1M)	264
N/20 – Sodium Thiosulfate (0.05M)	264
N/2 – Sodium Thiosulfate (0.5M)	264
N/40 – Sodium Thiosulfate (0.025M)	264
Sodium Tripolyphosphate	264
Sodium Tungstate dihydrate	265
Sodium L–ascorbate	265

Product	Page
Sorbic acid potassium salt	265
Sorbitan monolaurate	265
Sorbitan monooleate	265
Sorbitan monopalmitate	265
Sorbitan monostearate	265
D–Sorbitol	265
L(–) Sorbose	265
Sonic Clean	265
Span 20	265
Span 40	265
Span 60	266
Span 80	266
Stannic Chloride Anhydrous	266
Stannic Oxide	266
Stannous Chloride dihydrate	266
Stannous pyrophosphate	266
Stannous Sulfate	266
Starch Corn	266
Starch Potato	267
Starch Soluble	267
Stearic acid	267
Stearyl Alcohol	267
Strontium Carbonate	267
Strontium Chloride hexahydrate	267
Strontium Hydroxide Octahydrate	267
Strontium Nitrate	268
Strontium Sulfate	268
Styrene Monomer	268
Succinic Acid	268
Sucrose	268
Sudan–III	268
Sudan–III Solution	268
Sulfamic Acid	269
Sulfanilamide 98%	269
Sulfanilic Acid	269
Sulfomethane	269
5–Sulfosalicylic Acid dihydrate	269
Sulfur powder	269
Sulfuric Acid 95%	270
Sulfuric Acid 15%	270
5N–Sulfuric Acid	270
2N–Sulfuric Acid (1M)	270
1N–Sulfuric Acid (0.5M)	270
N/2–Sulfuric Acid (0.25M)	271
N/5–Sulfuric Acid (0.1M)	271
N/10–Sulfuric Acid (0.05M)	271
N/20–Sulfuric Acid(0.025M)	271
N/40–Sulfuric Acid(0.0125M)	271
N/50–Sulfuric Acid(0.01M)	271

Product	Page
N/100–Sulfuric Acid(0.005M)	271
Sulfuric Acid diluted pH4	271
Tannic Acid	275
DL–Tartaric Acid	275
L(+)–Tartaric Acid	275
TDI	275
1,1,2,2–Tetrachloroethane	275
Tetrachloroethylene	275
Tetradecanoic acid	275
Tetraethyl o–silicate	275
Tetrahydrofuran	275
Tetrahydrofuran Stabilized with 250ppm BHT	276
Tetrahydro–1,4–oxazine	276
Tetramethyl Ammonium Chloride	276
Tetramethylammonium Hydroxide 20%	276
Tetrazolium Salt	277
THAM	277
THF	277
Thiamine hydrochloride	277
Thiazole Yellow G	277
Thioacetamide	277
Thiourea	277
L–Threonine for Biochemistry	277
Thymol	277
Thymol Blue	278
Thymol Blue Solution 0.1%	278
Thymolphthalein Solution 0.1%	278
Thymolsulfophthalein	278
Tin dichloride	278
Tin(II) diphosphate	278
Tin(IV) oxide	278
Tin Powder	278
Tin(II) Pyrophosphate	278
Tin(II) sulfate	278
Titan Yellow	278
Titanium Dioxide	278
Titanium Powder	278
Titanium(IV) oxide	279
TMAH 20%	279
o–Tolidine Solution	279
Toluene	279
Toluene 2,4–Diisocyanate	280
p–Toluene Sulfonic Acid	280
4–Toluenesulfonyl Chloride	280
p–Toluenesulfonyl Chloride	280
Toluidine Blue	280
Tosylchloramide sodium	280
Tragacanth Powder	280
Tributylamine	280

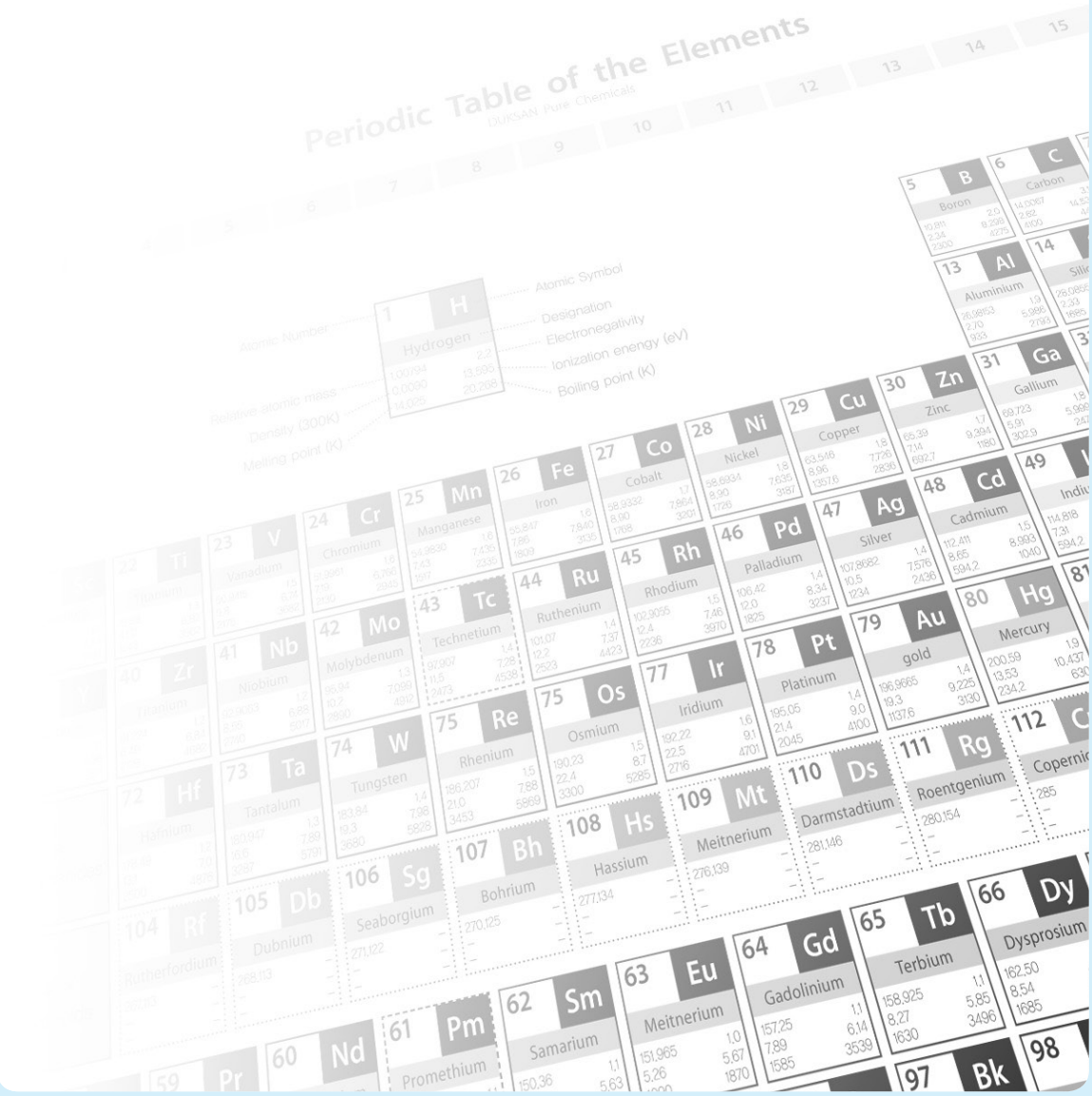
Product	Page
Tributyl phosphate	281
Trichloroacetic Acid	281
1,2,4–Trichlorobenzene	281
Trichloro Ethylene	281
1,1,1–Trichloroethane	282
Trichloromethane	282
Triethanolamine	282
TriethylAmine	282
Triethyl Phosphate	282
Triethyl Phosphite	283
Triethylene diamine	283
Triethylene Glycol	283
Triethylene tetramine	283
Trifluoroacetic acid	283
Triiron tetraoxide	283
Trilead tetraoxide	283
Trimethylamine 30%	283
2,2,4–Trimethylpentane	284
Triphenylphosphine	284
Tris(hydroxylmethyl) Aminomethane	284
Trisodium citrate dihydrate	284
Trisodium phosphate	284
Triton X–100	284
Tropaeolin O	284
L(–)–Tryptophan	284
Tungsten (VI) Oxide	284
Tween 20	285
Tween 40	285
Tween 60	285
Tween 80	285
L–Tyrosine	285
Ultra clean	289
Unicide 128	289
Uranine Solution	289
Urea	289
Vacuum Pump Oil	293
Vanadium(V) oxide	293
Vanadium pentoxide	293
L–Valine	293
Vanillin	293
Vaseline White	293
Vinylbenzene	293
Vitamin B2	293
Vitamin C	293
Water	297
Wijs' solution	297
Xylene cyanol FF	301
Xylene	301
D–Xylose	301

Alphabetical list Numbers

Products of DUKSAN

Product	Page
Yeast Dried	305
Zinc, Powder	309
Zinc Acetate dihydrate	309
Zinc Carbonate, basic	309
Zinc Chloride	309
Zinc Cyanide	309
Zinc Nitrate Hexahydrate	309
Zinc Oxide	310
Zinc Phosphate Tetrahydrate	310
Zinc Stearate	310
Zinc Sulfate Heptahydrate	310
Zirconium (IV) oxide 98.5%	310

CAS
Registry Numbers



CAS Registry Numbers

Products of DUKSAN

CAS Registry No.	Catalogue Name	Page
50-00-0	Formaline	140
50-01-1	Guanidine Hydrochloride	148
50-21-5	Lactic acid	173
50-69-1	D(-)-Ribose	241
50-70-4	D-Sorbitol	265
50-81-7	L-Ascorbic Acid	69
50-99-7	Dextrose anhydrous	113
51-28-5	2,4-Dinitrophenol	120
54-21-7	Sodium Salicylate	261
55-21-0	Benzamide	76
55-55-0	Metol	195
56-40-6	Glycine	147
56-41-7	L-Alanine	58
56-45-1	L-Serine	247
56-81-5	Glycerine	146
56-84-8	L(+)-Aspartic Acid	69
56-85-9	L(+)-Glutamine	146
56-86-0	L-Glutamic Acid	146
57-09-0	N-Cetyl-N,N,N Trimethyl Ammonium Bromide	98
57-10-3	Palmitic acid	214
57-11-4	Stearic acid	267
57-13-6	Urea	289
57-48-7	D(-)-Fructose	141
57-50-1	Saccharose	246
57-55-6	Propylene Glycol	233
57-88-5	Cholesterol	100
58-08-2	Caffeine anhydrous	92
58-86-6	D-Xylose	301
59-51-8	DL-Methionine	186
59-67-6	Nicotinic acid	203
59-88-1	Phenyl Hydrazine Hydrochloride	218
60-00-4	Ethylenediaminetetraacetic acid	135
60-11-7	Methyl Yellow	195
60-18-4	L-Tyrosine	285
60-27-5	Creatinine	106
60-29-7	Ethyl Ether	132
61-90-5	L-Leucine	175
62-33-9	Ethylenediaminetetraacetic acid Calcium Disodium	136
62-53-3	Aniline	67
62-55-5	Thioacetamide	277
62-56-6	Thiourea	277
62-76-0	Sodium Oxalate	258
62-76-0	N/10 – Sodium Oxalate (0.05M)	259
63-68-3	L-Methionine	186
63-74-1	Sulfanilamide 98%	269
63-91-2	L(-)-Phenylalanine	218
64-02-8	Ethylenediaminetetraacetic acid tetrasodium salt tetrahydrate	136
64-17-5	Ethyl Alcohol 99.9%	129
64-18-6	Formic acid	141

CAS Registry No.	Catalogue Name	Page
64-19-7	Acetic Acid, glacial	52
64-67-5	Diethyl Sulfate	116
65-85-0	Benzoic Acid	77
67-03-8	Thiamine hydrochloride	277
67-48-1	Choline Chloride	100
67-56-1	Methyl Alcohol	187
67-63-0	Iso-Propyl Alcohol	164
67-64-1	Acetone	54
67-66-3	Chloroform	98
67-68-5	Dimethyl Sulfoxide	120
68-12-2	N,N-Dimethyl Formamide	119
69-65-8	D-Mannitol	183
69-72-7	Salicylic Acid	246
71-00-1	L-Histidine	153
71-23-8	1-Propanol	232
71-36-3	n-Butyl Alcohol	84
71-41-0	n-Amyl Alchol	67
71-43-2	Benzene	76
71-55-6	1,1,1-Trichloroethane	282
72-17-3	Sodium Lactate 50% solution	257
72-18-4	L-Valine	293
72-19-5	L-Threonine	277
72-48-0	Alizarin	58
73-22-3	L(-)-Tryptophan	284
73-24-5	Adenine	57
73-32-5	L(+)-Isoleucine	162
74-79-3	L-Arginine	69
74-89-5	Methylamine Solution 40%	189
75-05-8	Acetonitrile	55
75-09-2	Methylene Chloride	190
75-12-7	Formamide	141
75-15-0	Carbon disulfide	97
75-36-5	Acetyl Chloride	56
75-50-3	Trimethylamine 30%	283
75-52-5	Nitromethane	205
75-57-0	Tetramethyl Ammonium Chloride	276
75-59-2	Tetramethylammonium Hydroxide 20%	276
75-64-9	tert-Butyl Amine	85
75-65-0	tert-Butyl Alcohol	85
75-75-2	Methanesulfonic Acid	185
76-03-9	Trichloroacetic Acid	281
76-05-1	Trifluoroacetic acid	283
76-59-5	Bromothymol blue	81
76-59-5	Bromothymol blue solution	81
76-60-8	Bromocresol green	80
76-61-9	Thymol Blue	278
77-06-5	Gibberellic Acid	145
77-09-8	Phenolphthalein	217
77-78-1	Dimethyl Sulfate	120

CAS Registry Numbers

Products of DUKSAN

CAS Registry No.	Catalogue Name	Page
77-86-1	Tris(hydroxylmethyl) Aminomethane	284
77-92-9	Citric Acid anhydrous	102
78-10-4	Tetraethyl o-silicate	275
78-40-0	Triethyl Phosphate	282
78-83-1	Iso-Butyl Alcohol	162
78-92-2	sec-Butyl Alcohol	84
78-93-3	Methyl Ethyl Ketone	191
79-01-6	Trichloro Ethylene	281
79-06-1	Acrylamide	57
79-09-4	Propionic acid	232
79-10-7	Acrylic Acid	57
79-11-8	Monochloroacetic Acid	196
79-14-1	Glycolic Acid	147
79-20-9	Methyl Acetate	187
79-34-5	1,1,2,2-Tetrachloroethane	275
79-41-4	Methacrylic acid	185
80-05-7	Bisphenol-A	79
80-62-6	Methyl Methacrylate	192
81-88-9	Rhodamine B	241
83-07-8	4-Aminoantipyrine	60
83-88-5	Riboflavin	241
84-66-2	Diethyl Phthalate	116
84-74-2	Dibutyl Phthalate	114
85-44-9	Phthalic anhydride	221
85-86-9	Sudan-III	268
86-87-3	1-Naphthylacetic Acid	201
87-66-1	Pyrogallol	234
87-69-4	L(+)-Tartaric Acid	275
87-72-9(5328-37-0)	L(+)-Arabinose	69
87-79-6	L(-) Sorbose	265
87-89-8	myo-Inositol	161
88-74-4	o-Nitroaniline	205
89-83-8	Thymol	277
90-15-3	1-Naphthol	201
90-43-7	o-Phenylphenol	219
90-44-8	Anthrone	68
91-20-3	Naphthalene	201
91-22-5	Quinoline	237
92-31-9	Toluidine Blue	280
94-13-3	Propyl Paraben	233
94-26-8	Butyl Paraben	86
95-14-7	1,2,3-Benzotriazol	77
95-50-1	o-Dichlorobenzene	114
95-54-5	o-Phenylenediamine	218
95-55-6	2-Aminophenol	61
96-33-3	Methyl Acrylate monomer	187
96-48-0	gamma-Butyrolactone	87
97-65-4	Itaconic Acid	165
97-88-1	Butyl Methacrylate monomer	86

CAS Registry No.	Catalogue Name	Page
98-00-0	Furfuryl Alcohol	142
98-01-1	Furfural	142
98-59-9	p-Toluenesulfonyl Chloride	280
98-92-0	Nicotinamide	203
98-95-3	Nitrobenzene	205
99-61-6	3-Nitrobenzaldehyde	205
99-76-3	Methyl Paraben	193
100-00-5	1-Chloro-4-Nitrobenzene	100
100-01-6	4-Nitroaniline	205
100-02-7	p-Nitrophenol	206
100-10-7	p-Dimethylaminobenzaldehyde	118
100-42-5	Styrene Monomer	268
100-44-7	Benzyl Chloride	78
100-46-9	Benzyl Amine	64
100-51-6	Benzyl Alcohol	78
100-52-7	Benzaldehyde	75
100-66-3	Anisole	67
100-85-6	40% Benzyltrimethylammonium Hydroxide Methanol solution	78
101-84-8	Phenyl Ether	218
102-71-6	Triethanolamine	282
102-76-1	Glycerol Triacetate	147
102-82-9	Tributylamine	280
103-11-7	2-Ethyl Hexyl Acrylate	133
103-84-4	Acetanilide	52
104-76-7	Iso-Octanol	163
105-45-3	Methyl Acetoacetate	187
105-58-8	Diethyl Carbonate	116
106-46-7	p-Dichlorobenzene	114
106-48-9	4-Chlorophenol	100
106-50-3	p-Phenylenediamine	219
106-89-8	Epichlorohydrin	127
107-06-2	Ethylene Dichloride	133
107-07-3	Ethylene Chlorohydrin	133
107-13-1	Acrylonitrile	57
107-15-3	Ethylene Diamine	133
107-18-6	Allyl Alcohol	59
107-21-1	Ethylene Glycol	134
107-41-5	Hexylene Glycol	153
107-92-6	Butyric Acid	86
107-98-2	1-Methoxy-2-Propanol	186
108-01-0	2-Dimethylaminoethanol	118
108-10-1	Methyl Isobutyl Ketone	192
108-20-3	Iso-Propyl Ether	165
108-21-4	Iso-Propyl Acetate	163
108-24-7	Acetic Anhydride	53
108-31-6	Maleic Anhydride	182
108-39-4	m-Cresol	106
108-46-3	Resorcinol	241
108-65-6	1-Methoxy-2-Propyl Acetate	186

CAS Registry Numbers

Products of DUKSAN

CAS Registry No.	Catalogue Name	Page
108-73-6	Phloroglucinol	219
108-78-1	Melamine	184
108-87-2	Methyl Cyclohexane	190
108-88-3	Toluene	279
108-90-7	Monochlorobenzene	196
108-91-8	Cyclohexylamine	108
108-94-1	Cyclohexanone	108
108-95-2	Phenol	217
109-02-4	n-Methyl Morpholine	192
109-66-0	n-Pentane	215
109-73-9	n-Butylamine	85
109-86-4	Ethylene Glycol monomethyl ether	134
109-89-7	Diethylamine	115
109-99-9	Tetrahydrofuran	275
109-99-9	Tetrahydrofuran Stabilized with 250ppm BHT	276
110-15-6	Succinic Acid	268
110-54-3	Hexanes	152
110-54-3	n-Hexane 95%	152
110-63-4	1,4-Butanediol	83
110-71-4	1,2-Dimethoxyethane	117
110-85-0	Piperazine anhydrous	221
110-80-5	Ethylene Glycol monoethyl ether	134
110-82-7	Cyclohexane	108
110-86-1	Pyridine	234
110-91-8	Morpholine	197
111-15-9	Ethylene Glycol monoethyl ether Acetate	135
111-40-0	Diethylene triamine	117
111-41-1	N-(2-Aminoethyl) Ethanolamine	61
111-42-2	Diethanolamine	115
111-46-6	Diethylene Glycol	116
111-76-2	Ethylene Glycol monobutyl ether	117
111-87-5	N-Octyl alcohol	209
111-90-0	Ethyl Carbitol	131
111-92-2	Dibutylamine	114
111-96-6	Diethylene glycol dimethyl ether	116
112-15-2	Ethyl Carbitol Acetate	131
112-24-3	Triethylene tetramine	283
112-27-6	Triethylene Glycol	283
112-30-1	1-Decanol	113
112-34-5	Butyl Carbitol	85
112-53-8	Lauryl Alcohol	174
112-80-1	Oleic Acid	209
112-92-5	Stearyl Alcohol	267
113-24-6	Sodium Pyruvate	261
115-39-9	Bromophenol blue	81
115-40-2	Bromocresol Purple	81
115-77-5	Pentaerythritol	215
116-63-2	1-Amino-2-naphthol-4-sulfonic acid	61
117-81-7	Dioctyl Phthalate	121

CAS Registry No.	Catalogue Name	Page
119-26-6	2,4-Dinitrophenyl hydrazine	121
119-36-8	Methyl Salicylate	195
119-53-9	Benzoin	77
119-61-9	Benzophenone	77
119-93-7	o-Tolidine Solution	279
120-12-7	Anthracene	67
120-47-8	Ethyl paraben	133
120-82-1	1,2,4-Trichlorobenzene	281
121-33-5	Vanillin	293
121-44-8	TriEthylAmine	282
121-54-0	Hyamine 1622	153
121-57-3	Sulfanilic Acid	269
121-69-7	N,N-Dimethylaniline	118
121-79-9	Propyl Gallate	233
122-39-4	Diphenylamine	122
122-52-1	Triethyl Phosphite	283
122-99-6	Ethylene Glycol monophenyl ether	135
123-31-9	Hydroquinone	156
123-42-2	Diacetone alcohol	113
123-51-3	Iso-Amyl Alcohol	162
123-54-6	Acetyl acetone	56
123-86-4	n-Butyl Acetate	83
123-91-1	1,4-Dioxane	121
123-95-5	Butyl Stearate	86
124-04-9	Adipic Acid	58
124-07-2	n-Caprylic Acid	97
124-17-4	Butyl Carbitol Acetate	86
124-41-4	Sodium Methoxide 30% sodution in methanol	257
124-63-0	Methanesulfonyl Chloride	185
126-73-8	TriButyl phosphate	281
127-08-2	Potassium Acetate	223
127-09-3	Sodium Acetate anhydrous	249
127-18-4	Perchloroethylene	216
127-19-5	N,N-Dimethyl Acetamide	117
128-09-6	N-Chlorosuccinimide	100
128-37-0	Butylated Hydroxy Toluene	85
130-22-3	Alizarine Red S	58
130-22-3	Allizaline Red S solution	58
131-11-3	Dimethyl phthalate	119
133-32-4	Indole-3-Butyric Acid	161
133-37-9	DL-Tartaric Acid	275
134-03-2	Sodium L-Ascobate	249
135-19-3	2-Naphthol	201
137-08-6	Calcium Pantothenate	95
139-13-9	Nitrilotriacetic Acid	205
139-33-3	M/20-EDTA-2Na	127
140-22-7	1,5-Diphenylcarbazide	122
141-32-2	Butyl Acrylate	84
141-43-5	Monoethanolamine	197

CAS Registry Numbers

Products of DUKSAN

CAS Registry No.	Catalogue Name	Page
141-78-6	Ethyl Acetate	128
141-97-9	Ethyl Acetoacetate	129
142-82-5	n-Heptane	151
143-07-7	Lauric acid	174
143-28-2	Oleyl Alcohol	209
143-33-9	Sodium Cyanide	253
143-74-8	Phenol Red	218
144-55-8	Sodium Bicarbonate	250
147-85-3	L(-)-Proline	232
148-24-3	8-Hydroxyquinoline	157
149-44-0	Rongalite	241
150-13-0	4-Aminobenzoic acid	61
151-21-3	Sodium Lauryl Sulfate	257
151-50-8	Potassium Cyanide	225
280-57-9	Triethylene diamine	283
288-32-4	Imidazole	161
298-14-6	Potassium Bicarbonate	223
302-72-7	DL-Alanine	58
333-20-0	Potassium Thiocyanate	231
357-57-3	Brucine	81
366-18-7	2,2'-Bipyridyl	78
367-51-1	Sodium Thioglycollate 80%	264
441-38-3	α-Benzoine oxime	77
461-58-5	Dicyandiamide	115
471-34-1	Calcium Carbonate heavy	92
477-73-6	Safranine O	246
485-47-2	Ninhydrine	203
493-52-7	Methyl Red	194
495-69-2	Hippuric Acid	153
497-19-8	Sodium Carbonate anhydrous	251
506-87-6	Ammonium Carbonate	63
513-77-9	Barium Carbonate	74
513-78-0	Cadmium Carbonate	92
513-79-1	Cobalt Carbonate basic	103
517-28-2	Hematoxylin Stain	151
525-05-3	Nitroso-R-Salt	206
527-07-1	Sodium Gluconate	254
532-32-1	Sodium Benzoate	250
536-46-9	N,N-Dimethyl p-Phenylenediamine dihydrochloride	119
538-62-5	Diphenyl Carbazone	122
538-75-0	N,N'-Dicyclohexylcarbodiimide	115
540-72-7	Sodium Thiocyanate	263
540-84-1	Iso-Octane	163
541-41-3	Ethyl Chloroformate	132
544-63-8	Myristic Acid	197
544-92-3	Copper (I) Cyanide	104
547-57-9	Tropaeolin O	284
547-58-0	Methyl Orange	193
548-62-9	Gentian Violet	145

CAS Registry No.	Catalogue Name	Page
553-24-2	Neutral red	201
554-13-2	Lithium Carbonate	176
557-04-0	Magnesium Stearate	181
557-05-1	Zinc Stearate	310
557-21-1	Zinc Cyanide	309
573-58-0	Congo Red	104
584-08-7	Potassium Carbonate Anhydrous	224
584-42-9	Allizaline Yellow GG	59
584-84-9	Toluene 2,4-Diisocyanate	280
587-98-4	Metanil Yellow	185
592-85-8	Mercuric Thiocyanate	184
598-62-9	Manganese(II) Carbonate	183
603-35-0	Triphenylphosphine	284
609-99-4	3,5-Dinitirososalicylic acid	121
616-38-6	Dimethyl Carbonate	118
616-45-5	2-Pyrrolidone	234
617-48-1	DL-Malic acid	182
620-45-1	2,6-Dichloroindophenol Sodium salt hydrate	115
631-61-8	Ammonium Acetate	62
632-99-5	Fuchsin Basic	141
633-03-4	Brilliant green	80
637-12-7	Aluminium Tristearate	60
646-06-0	1,3-Dioxolane	122
657-27-2	L-Lysine monohydrochloride	176
822-16-2	Sodium Stearate	262
860-22-0	Indigo Carmine 0.1% solution	161
868-14-4	Potassium Bitartrate	224
868-77-9	2-Hydroxy Ethylmethacrylate	156
872-50-4	N-Methyl-2-Pyrrolidone	193
877-24-7	Potassium Hydrogen Phthalate	227
999-97-3	1,1,1,3,3,3-Hexamethyldisilazane	151
1066-33-7	Ammonium Bicarbonate	62
1072-35-1	Lead(II) Stearate	175
1111-67-7	Copper(I) Thiocyanate	105
1119-34-2	L-Arginine Monohydrochloride	69
1122-58-3	4-Dimethylaminopyridine	118
1185-57-5	Ammonium Iron(III) Citrate, brown	64
1193-92-6	Litmus Granular	176
1214-39-7	6-Benzyl Adenine	77
1302-78-9	Bentonite	75
1303-86-2	Boron trioxide	80
1303-96-4	Borax	79
1304-29-6	Barium Peroxide	74
1304-76-3	Bismuth trioxide	79
1305-62-0	Calcium Hydroxide	94
1305-78-8	Calcium Oxide	95
1306-19-0	Cadmium Oxide	92
1308-06-1	Cobalt(II,III) Oxide	104
1308-38-9	Chromium(III) Oxide	101

CAS Registry Numbers

Products of DUKSAN

CAS Registry No.	Catalogue Name	Page
1309-37-1	Ferric Oxide red	139
1309-42-8	Magnesium Hydroxide	180
1309-48-4	Magnesium Oxide heavy	181
1309-64-4	Antimony Trioxide	68
1310-58-3	Potassium Hydroxide	227
1310-58-3	Potassium Hydroxide 45%	227
1310-66-3	Lithium Hydroxide monohydrate	176
1310-73-2	Sodium Hydroxide	254
1311-10-0	Strontium Hydroxide Octahydrate	267
1312-81-8	Lanthanum Oxide	173
1313-13-9	Manganese Dioxide	182
1313-27-5	Molybnenum(VI) Oxide	196
1313-99-1	Nickel Oxide	202
1314-13-2	Zinc Oxide	310
1314-23-4	Zirconium(IV) oxide 98.5%	310
1314-35-8	Tungsten(VI) Oxide	284
1314-41-6	Lead(II, IV) Oxide, Red	175
1314-56-3	Phosphorus Pentoxide	220
1314-62-1	Vanadium pentoxide	293
1317-33-5	Molybdenum Disulfide	196
1317-36-8	Lead(II) Oxide (Litharge)	175
1317-37-9	Ferrous Sulfide	140
1317-38-0	Copper(II) Oxide	106
1317-39-1	Copper (I) Oxide	105
1317-61-9	Iron(II, III) Oxide black	162
1319-46-6	Lead(II) Carbonate basic	174
1327-53-3	Arsenic Trioxide	69
1330-20-7	Xylene	301
1332-58-7	Kaoline	169
1333-82-0	Chromium trioxide	101
1336-21-6	Ammonia Water 28%	61
1338-39-2	Span 20	265
1338-41-6	Span 60	266
1338-43-8	Span 80	266
1341-49-7	Ammonium Bifluoride	62
1344-09-8	Sodium Silicate powder	261
1344-28-1	Aluminium Oxide, activated, granule	60
1344-28-1	Aluminium Oxide powder	60
1390-65-4	Carmine	97
1400-62-0	Orcein	209
1401-55-4	Tannic Acid	275
1465-25-4	N-(1-Naphthyl)ethylenediamine dihydrochloride	201
1470-61-7	Silver Diethyldithiocarbamate	248
961518-58-7	Diethyl Ammonium-N,N-Diethyldithiocabamate	116
1592-23-0	Calcium Stearate	96
1600-27-7	Mercury(II) Acetate	184
1633-05-2	Strontium Carbonate	267
1634-04-4	Methyl tert-Butyl Ether	189
1733-12-6	Cresol Red	107

CAS Registry No.	Catalogue Name	Page
1762-95-4	Ammonium Thiocyanate	67
1787-61-7	Eriochrome Black T	127
1829-00-1	Titan Yellow	278
1871-22-3	Tetrazolium Salt	277
1936-15-8	Orange G	209
2216-51-5	L-Menthol	184
2303-01-7	m-Cresol Purple	107
2321-07-5	Fluorescein	140
2437-29-8	Malachite Green Oxalate	182
2466-09-3	Pyrophosphoric acid	223
2832-45-3	1-Hexane Sulfonic acid Sodium salt	153
3012-65-5	Ammonium Citrate dibasic	63
3051-09-0	Ammonium Purpurate	65
3164-29-2	Ammonium (+)-Tartrate	66
3244-88-0	Fuchsin Acid for Microscopy	141
3349-06-2	Nickel(II) Formate Dihydrate	202
3385-41-9	Ammonium Adipate	62
3811-04-9	Potassium Chlorate	224
4196-99-0	Biebrich Scarlet	78
4430-20-0	Chlorophenol Red	100
4463-44-9	Xylene cyanol FF	301
5141-20-8	Light Green for Microscopy	175
5144-89-8	1,10-Phenanthroline monohydrate	217
5324-84-5	1-Octane Sulfonic acid Sodium salt	209
5329-14-6	Sulfamic Acid	269
5470-11-1	Hydroxylamine Hydrochloride	157
5743-04-4	Cadmium Acetate dihydrate	92
5743-26-0	Calcium Acetate monohydrate	92
5743-47-5	Calcium Lactate	94
5785-44-4	Calcium Citrate tetrahydrate	93
5808-22-0	Chromotropic Acid Disodium salt	101
5934-29-2	L-Histidine monohydrochloride monohydrate	153
5949-29-1	Citric Acid monohydrate	102
5965-83-3	5-Sulfosalicylic Acid dihydrate	269
5970-45-6	Zinc Acetate dihydrate	309
5989-81-1	Lactose monohydrate	173
5995-86-8	Gallic Acid monohydrate	145
6009-70-7	Ammonium Oxalate monohydrate	65
6018-89-9	Nickel Acetate tetrahydrate	202
6020-87-7	Creatine Monohydrate	106
6046-93-1	Copper(II) Acetate monohydrate	105
6080-56-4	Lead(II) Acetate trihydrate	174
6100-05-6	Potassium Citrate monohydrate	225
6100-19-2	Potassium Tartrate hemihydrate	231
6106-04-3	L(+)-Glutamic Acid monosodium salt	146
6106-21-4	Sodium Succinate hexahydrate	262
6106-24-7	Sodium Tartrate dihydrate	263
6131-90-4	Sodium Acetate trihydrate	249
6132-04-3	Sodium Citrate tribasic dihydrate	253

CAS Registry Numbers

Products of DUKSAN

CAS Registry No.	Catalogue Name	Page
6147-53-1	Cobalt Acetate tetrahydrate	103
6153-56-6	Oxalic Acid dihydrate	210
6192-52-5	p-Toluene Sulfonic Acid	280
6211-24-1	Barium diphenylamine Sulfonate	74
6303-21-5	Hypophosphorous Acid	157
6363-53-7	Maltose monohydrate	182
6381-59-5	Rochelle Salt	241
6381-92-6	Ethylenediaminetetraacetic acid disodium salt dihydrate	136
6484-52-2	Ammonium Nitrate	65
6487-48-5	Potassium Oxalate monohydrate	229
6865-35-6	Barium Stearate	75
7048-04-6	L-Cysteine Hydrochloride monohydrate	109
7080-50-4	Chloramine-T trihydrate	98
7087-68-5	N-Ethyldiisopropylamine	132
7220-79-3	Methylene Blue trihydrate	190
7320-34-5	Potassium Pyrophosphate	230
7429-90-5	Aluminium Powder	60
7439-89-6	Iron Powder	162
7439-92-1	Lead Powder	175
7439-93-2	Lithium Metal, Coated	176
7439-95-4	Magnesium powder	181
7439-95-4	Magnesium turnings	182
7439-97-6	Mercury	184
7440-23-5	Sodium, metal	257
7440-31-5	Tin Powder	278
7440-32-6	Titanium Powder	278
7440-36-0	Antimony Powder	68
7440-44-0	Activated Carbon	57
7440-47-3	Chromium metal Powder	101
7440-50-8	Copper foil (0.1mm approx.)	104
7440-50-8	Copper Powder	104
7440-66-6	Zinc, Powder	309
7446-08-4	Selenium Dioxide	246
7446-20-0	Zinc Sulfate Heptahydrate	310
7446-70-0	Aluminium Chloride, anhydrous	59
7447-40-7	Potassium Chloride	225
7447-41-8	Lithium Chloride anhydrous	176
7487-88-9	Magnesium Sulfate anhydrous	181
7487-94-7	Mercury(II) Chloride	184
7488-55-3	Stannous Sulfate	266
7543-51-3	Zinc Phosphate Tetrahydrate	310
7553-56-2	Iodine	161
7558-79-4	Sodium Phosphate dibasic anhydrous	260
7601-90-3	Perchloric Acid 60%	216
7631-86-9	Sea Sand	246
7631-86-9	Silicagel Medium Granular (Blue)	247
7631-86-9	Silicagel Medium Granular (White)	247
7631-86-9	Silicon Dioxide	247
7631-90-5	Sodium Bisulfite	250

CAS Registry No.	Catalogue Name	Page
7631-99-4	Sodium Nitrate	258
7632-00-0	Sodium Nitrite	258
7646-78-8	Stannic Chloride Anhydrous	266
7646-85-7	Zinc Chloride	309
7647-01-0	Hydrochloric acid 37%	154
7647-14-5	Sodium Chloride	252
7647-15-6	Sodium Bromide	251
7647-17-8	Cesium Chloride	98
7664-38-2	Phosphoric acid	220
7664-39-3	Hydrofluoric acid	155
7664-93-9	Sulfuric Acid 95%	270
7681-11-0	Potassium Iodide	228
7681-49-4	Sodium Fluoride	254
7681-52-9	Sodium Hypochlorite solution	256
7681-57-4	Sodium Metabisulfite	257
7681-65-4	Copper(I) Iodide	105
7681-82-5	Sodium Iodide	256
7697-37-2	Nitric Acid	203
7704-34-9	Sulfur powder	269
7705-08-0	Ferric Chloride anhydrous	139
7722-64-7	Potassium Permanganate	229
7722-76-1	Ammonium Phosphate monobasic	66
7722-84-1	Hydrogen Peroxide 30%	156
7722-88-5	Sodium Pyrophosphate anhydrous	261
7723-14-0	Phosphorus Red	221
7727-21-1	Potassium Persulfate	230
7727-43-7	Barium Sulfate	75
7727-54-0	Ammonium Persulfate	65
7727-73- 3	Sodium Sulfate decahydrate	263
7732-18-5	Water	297
7757-79-1	Potassium Nitrate	229
7757-82-6	Sodium Sulfate anhydrous	262
7757-83-7	Sodium Sulfite anhydrous	263
7758-01-2	Potassium Bromate	224
7758-02-3	Potassium Bromide	224
7758-05-6	Potassium Iodate	228
7758-11-4	Potassium Phosphate dibasic	230
7758-19-2	Sodium Chlorite	252
7758-29-4	Sodium Tripolyphosphate	264
7758-79-4	Sodium phosphate dibasic anhydrous	260
7758-80-7	Sodium Phosphate monobasic anhydrous	260
7758-87-4	Calcium Phosphate tribasic	96
7758-89-6	Copper(I) Chloride	104
7758-95-4	Lead(II) Chloride	174
7758-97-6	Lead(II) Chromate, Precipitated	174
7758-98-7	Copper(II) Sulfate anhydrous	106
7758-99-8	Copper(II) Sulfate Pentahydrate	106
7759-02-6	Strontium Sulfate	268
7761-88-8	Silver Nitrate	248

CAS Registry Numbers

Products of DUKSAN

CAS Registry No.	Catalogue Name	Page
7772-98-7	Sodium Thiosulfate anhydrous	264
7773-06-0	Ammonium sulfamate	66
7774-29-0	Mercury(II) Iodide Red	184
7775-09-9	Sodium Chlorate	252
7775-14-6	Sodium Hydrosulfite	254
7775-27-1	Sodium Persulfate	259
7778-50-9	Potassium Dichromate	226
7778-53-2	Potassium Phosphate tribasic	230
7778-54-3	Calcium Hypochlorite	94
7778-77-0	Potassium Phosphate monobasic	230
7778-80-5	Potassium Sulfate	231
7782-42-5	Graphite powder	147
7782-49-2	Selenium, powder	247
7782-61-8	Ferric Nitrate nonahydrate	139
7782-63-0	Ferrous Sulfate heptahydrate	140
7782-91-4	Molybdic Acid 85%	196
7783-20-2	Ammonium Sulfate	66
7783-28-0	Ammonium Phosphate dibasic	66
7783-33-7	Nessler's solution	201
7783-34-8	Mercury(II) Nitrate monohydrate	185
7783-35-9	Mercury(II) Sulfate	185
7783-40-6	Magnesium Fluoride	180
7783-83-7	Ammonium Iron(III) Sulfate dodecahydrate	64
7783-85-9	Ammonium Iron(II) Sulfate hexahydrate	64
7783-90-6	Silver Chloride	248
7784-18-1	Aluminium Fluoride	59
7784-24-9	Potassium Aluminium Sulfate	223
7784-26-1	Aluminium Ammonium Sulfate 12-water	59
7784-27-2	Aluminium Nitrate nonahydrate	59
7784-31-8	Aluminium Sulfate crystal 16~18water	60
7784-46-5	Sodium Arsenite	249
7789-00-6	Potassium Chromate	225
7789-02-8	Chromium(III) Nitrate nonahydrate	101
7789-09-5	Ammonium Dichromate	64
7789-12-0	Sodium Dichromate dihydrate	253
7789-23-3	Potassium Fluoride	226
7789-38-0	Sodium Bromate	251
7789-75-5	Calcium Fluoride	93
7789-77-7	Calcium Phosphate dibasic dihydrate	95
7789-78-8	Calcium Hydride	94
7789-79-9	Calcium Hypophosphite	94
7791-13-1	Cobalt Chloride hexahydrate	103
7791-18-6	Magnesium Chloride hexahydrate	180
7791-20-0	Nickel Chloride hexahydrate	202
7803-55-6	Ammonium Metavanadate	64
7803-57-8	Hydrazine monohydrate	154
8000-27-9	Cedar Oil	97
8001-25-0	Olive oil	209
8001-26-1	Linseed oil	176

CAS Registry No.	Catalogue Name	Page
8001-54-5	Benzalkonium Chloride 50%	75
8001-79-4	Castor Oil	97
8002-43-5	Lecithin	175
8002-74-2	Paraffin (56-58℃)	214
8004-87-3	Methyl Violet 2B	195
8006-28-8	Soda Lime	249
8006-54-0	Lanoline	173
8007-47-4	Canada Balsam	96
8009-03-8	Vaseline White	293
8012-89-3	Bees Wax White	75
8012-95-1	Paraffin Liquid	214
8017-16-1	Polyphosphoric Acid	223
8030-30-6	Petroleum Benzine	216
8032-32-4	Petroleum Ether(35~60℃)	216
8049-11-4	Devardas Alloy	113
9000-01-5	Arabic Gum powder	68
9000-30-0	Guar Gum	148
9000-65-1	Tragacanth, Powder	280
9000-69-5	Pectin	214
9000-70-8	Gelatin	145
9000-71-9	Caseine from Milk	97
9000-92-4	Diastase(fungal)	114
9002-18-0	Agar powder	58
9002-89-5	Polyvinyl Alcohol 500	223
9002-93-1	Triton X-100	248
9003-39-8	Polyvinyl pyrrolidone	223
9004-32-4	CMC Na	102
9004-53-9	Dextrine	113
9004-57-3	Ethyl Cellulose (18-22 cps)	131
9004-67-5	Methyl Cellulose (4000cps)	190
9005-25-8	Starch Corn	266
9005-25-8	Starch Potato	267
9005-38-3	Sodium Alginate	249
9005-64-5	Tween 20	285
9005-65-6	Tween 80	285
9005-66-7	Tween 40	285
9005-67-8	Tween 60	285
9005-84-9	Starch Soluble	267
9050-04-8	CMC Ca	102
10022-31-8	Barium Nitrate	74
10022-68-1	Cadmium Nitrate tetrahydrate	92
10025-69-1	Stannous Chloride dihydrate	266
10025-70-4	Strontium Chloride hexahydrate	267
10025-77-1	Ferric Chloride hexahydrate	139
10025-84-0	Lanthanum Chloride heptahydrate	173
10025-87-3	Phosphorus Oxychloride	220
10025-91-9	Antimony Trichloride	68
10026-22-9	Cobalt Nitrate hexahydrate	103
10026-24-1	Cobalt Sulfate heptahydrate	103

CAS Registry Numbers

Products of DUKSAN

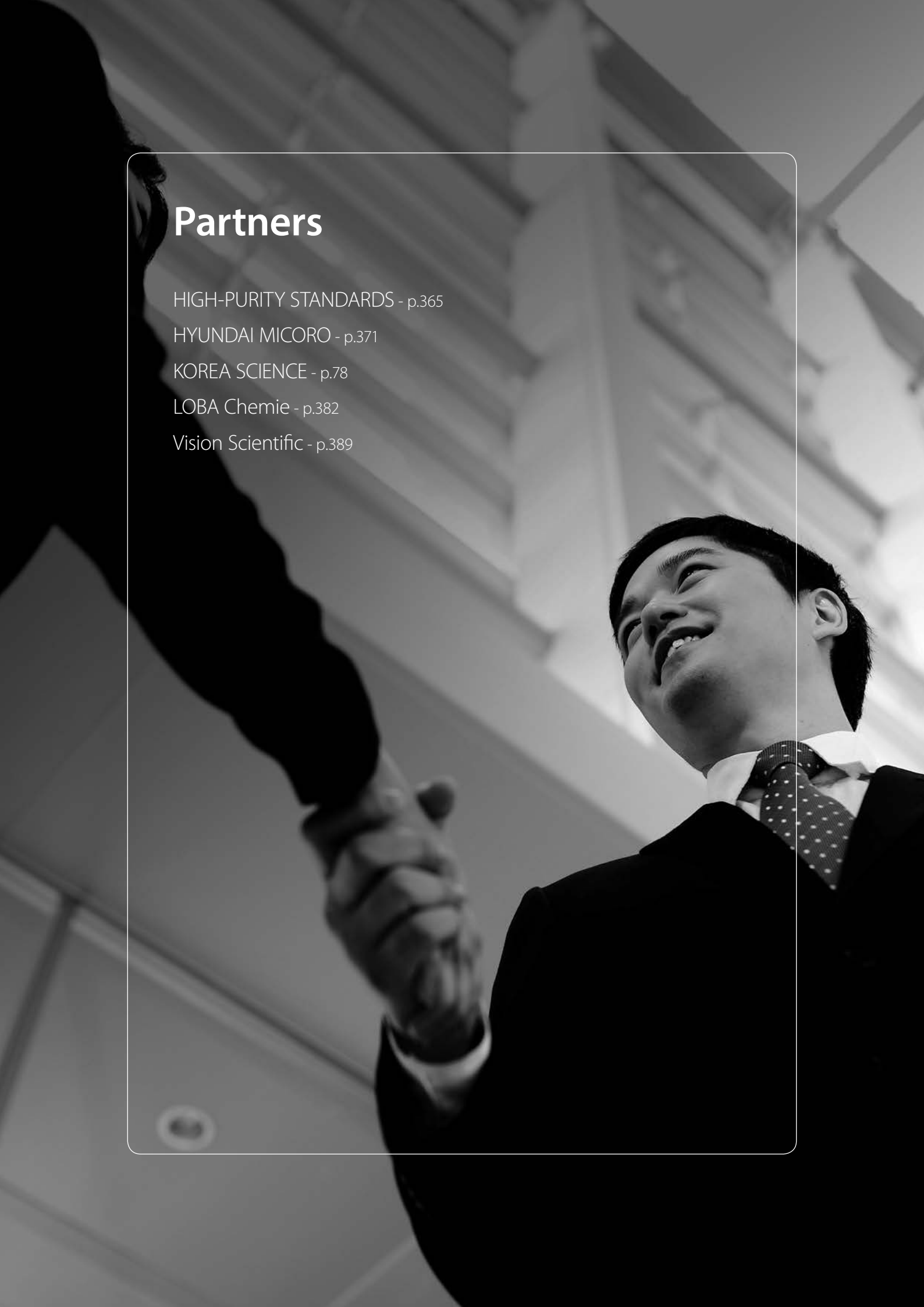
CAS Registry No.	Catalogue Name	Page
10028-24-7	Sodium Phosphate dibasic dihydrate	260
10031-30-8	Calcium Phosphate monobasic	95
10031-43-3	Copper(II) Nitrate trihydrate	106
10034-76-1	Calcium Sulfate Calcined	96
10034-82-9	Sodium Chromate tetrahydrate	253
10034-88-5	Sodium Bisulfate monohydrate	250
10034-93-2	Hydrazine Sulfate	154
10034-96-5	Manganese Sulfate monohydrate	182
10034-99-8	Magnesium Sulfate heptahydrate	181
10035-04-8	Calcium Chloride dihydrate	93
10035-06-0	Bismuth(III) Nitrate pentahydrate	79
10039-32-4	Sodium Phosphate dibasic 12-water	259
10039-54-0	Hydroxylamine Sulfate	157
10039-56-2	Sodium Phosphinate monohydrate	260
10042-76-9	Strontium Nitrate	268
10043-11-5	Boron Nitride	80
10043-35-3	Boric acid	80
10043-52-4	Calcium Chloride (for drying)	93
10043-52-4	Calcium Chloride anhydrous	93
10049-21-5	Sodium Phosphate monobasic monohydrate	260
10060-12-5	Chromium(III) Chloride, hexahydrate	101
10060-13-6	Copper(II) Diammonium Chloride dihydrate	105
10099-74-8	Lead(II) Nitrate	175
10101-41-4	Calcium sulfate dihydrate	96
10101-89-0	Sodium Phosphate tribasic 12-water	260
10101-97-0	Nickel Sulfate hexahydrate	202
10102-17-7	Sodium Thiosulfate pentahydrate	264
10102-18-8	Sodium Selenite	261
10102-40-6	Sodium Molybdate dihydrate	258
10112-91-1	Mercurous Chloride	184
10114-58-6	Bismarck Brown Y	79
10124-56-8	Sodium Hexametaphosphate	254
10125-13-0	Copper(II) Chloride dihydrate	105
10127-02-3	Acridine Orange	56
10196-18-6	Zinc Nitrate Hexahydrate	309
10213-10-2	Sodium Tungstate dihydrate	265
10277-43-7	Lanthanum Nitrate hexahydrate	173
10294-26-5	Silver Sulfate	248
10294-41-4	Cerium(Ⅲ) Nitrate hexahydrate	98
10326-27-9	Barium Chloride dihydrate	74
10378-47-9	Ammonium Ceric Sulfate	63
10486-00-7	Sodium Perborate tetrahydrate	259
12054-85-2	Ammonium Molybdate tetrahydrate	65
12058-66-1	Sodium Stannate trihydrate	262
12069-69-1	Copper(II) Carbonate Basic	105
12122-17-7	Zinc Carbonate, basic	309
12124-97-9	Ammonium Bromide	63
12125-01-8	Ammonium Fluoride	64
12125-02-9	Ammonium Chloride	63

CAS Registry No.	Catalogue Name	Page
12230-71-6	Barium Hydroxide octahydrate	74
12232-99-4	Sodium Bismuthate	250
12501-23-4	Phosphotungstic Acid	221
13235-36-4	Ethylenediaminetetraacetic acid tetrasodium salt tetrahydrate	136
13446-18-9	Magnesium Nitrate hexahydrate	180
13446-34-9	Manganese(II) Chloride tetrahydrate	183
13463-67-7	Titanium Dioxide	278
13472-30-5	Sodium Orthosilicate	258
13472-35-0	Sodium Phosphate monobasic dihydrate	260
13472-36-1	Sodium Pyrophosphate decahydrate	261
13477-34-4	Calcium Nitrate tetrahydrate	95
13478-00-7	Nickel(II) Nitrate hexahydrate	202
13478-10-9	Ferrous Chloride tetrahydrate	139
13517-24-3	Sodium Metasilicate nonahydrate	257
13590-82-4	Ceric Sulfate	98
13598-36-2	Phosphonic acid	219
13600-98-1	Sodium Cobaltnitrite	253
13746-66-2	Potassium Ferricyanide	226
13755-38-9	Sodium Nitroprusside	258
14459-95-1	Potassium Ferrocyanide	226
15096-52-3	Cryolite	107
15244-35-6	Cadmium Sulfate hydrate	92
15244-36-7	Manganese Sulfate pentahydrate	183
15578-26-4	Tin(II) Pyrophosphate	278
15630-89-4	Sodium Percarbonate	259
15699-18-0	Ammonium Nickel(II) Sulfate hexahydrate	65
15708-41-5	Ethylenediaminetetraacetic acid monosodium iron(Ⅲ) salt trihydrate	136
16674-78-5	Magnesium Acetate tetrahydrate	180
16731-55-8	Potassium Metabisulfite	228
16872-11-0	Fluoroboric acid	140
16893-85-9	Sodium Silicofluoride	262
16940-66-2	Sodium Borohydride	251
17141-63-8	Manganese(II) Nitrate hexahydrate	183
17372-87-1	Eosin Y	127
17455-13-9	18-Crown-6-Ether	107
18282-10-5	Stannic Oxide	266
20624-25-3	Sodium N,N-diethyldithiocarbamate trihydrate	253
21368-68-3	DL-Camphor	96
21645-51-2	Aluminium Hydroxide	59
24634-61-5	Potassium Sorbate	231
25155-30-0	Dodecylbenzenesulphonic acid Sodium salt	123
25322-68-3	Polyethylene Glycol 200	221
26266-57-9	Span 40	265
26628-22-8	Sodium Azide	250
27214-00-2	Calcium Glycerophosphate	94
27610-45-3	Sodium sulfide hydrate	263
28300-74-5	Antimony Potassium Tartrate hemihydrate	68
28631-66-5	Aniline Blue water soluble	67
30525-89-4	Paraformaldehyde	214

CAS Registry Numbers

Products of DUKSAN

CAS Registry No.	Catalogue Name	Page
33864-99-2	Alcian Blue 8GX	58
36653-82-4	Cetyl Alcohol	98
37267-86-0	meta-Phosphoric Acid	185
39409-82-0	Magnesium Carbonate basic light	180
39430-27-8	Nickel Carbonate basic	202
42249-61-6	Lacmoid	173
51429-74-4	Phosphomolybdic acid	219
51811-82-6	Giemsa's Stain	145
51811-82-6	Giemsa's Staining Solution	145
55465-40-4	Molecular sieve 3A	195
55465-40-4	Molecular sieve 5A	195
61790-53-2	Celite 545	97
63148-62-9	Silicone High Vacuum Grease	247
65997-17-3	Glass Wool	145
66905-23-5	Calcium Gluconate	94
70955-01-0	Molecular sieve 4A	195
73049-73-7	Peptone	215
124594-15-6	Nickel Sulfamate tetrahydrate	202



Partners

HIGH-PURITY STANDARDS - p.365

HYUNDAI MICORO - p.371

KOREA SCIENCE - p.78

LOBA Chemie - p.382

Vision Scientific - p.389

HIGH-PURITY STANDARDS

2015

CATALOG OF ANALYTICAL STANDARDS

ORGANIC & INORGANIC

Order online at www.highpuritystandards.com or call toll free 866-767-4771

ISO 9001:2008 REGISTERED
ISO/IEC 17025:2005 ACCREDITED
ISO GUIDE 34:2009 ACCREDITED

Introduction to High-Purity Standards

High-Purity Standards offers a comprehensive line of single element stardards. These lines include the choice of mineral acid as a matrix, providing options to support a wide range of methods and applications, including methods that require adherence to the EU Pharmacopoeia monographs.

To this large product base we now offer single metal components from different source materials – *second source CRMs*. Second source standards offer you the option of purchasing a true second source when you need it, without sacrificing quality requirements, at the same time as your first purchase. These new products offer options on trace metal impurities. The source material has been selected to provide a highly pure standard, but may give you trade-offs on low level impurities. These CRMs are traceable to the NIST SRM standards. *See our website for samples of Certificates of Analysis for these new products.*

Custom Designed Products

Our staff has extensive experience in a wide range of applications, including metal and inorganic solutions, solid blend reference materials, and industrial hygiene and air monitoring standards. You can view the latest research into hexavalent chromium on filters on our Pittcon Poster and our website. We also now have custom standards utilizing laser ablation/LIBS methodologies.

Packaging Options

We stock inorganic solutions in 50, 100, 250 and 500mL sizes. The 50mL size is designed specifically to limit waste disposal costs. We also offer smaller volumes that meet excepted quantity limits for hazardous shipping.

Organic standards are available in 1, 2, 5 and 10mL ampules. Smaller and larger volumes are also available.

Quality System

We are registered with ISO 9001:2008, and accreditited with ISO/IEC 17025:2005 and ISO Guide 34:2009. Our certificates are available online at our website.

Connie Rains Hayes
High-Purity Standards
President & CEO

High-Purity Standards, Inc. was founded by Dr. Theodore Rains following his retirement from the National Institute of Standards and Technology (NIST). High-Purity Standards is a certified Women's Business Enterprise.

Table of Contents

Ordering Information. 2

Organic Multicomponent Standards . . . . . 3 - 6
Semivolatiles 3
Petroleum and Underground Storage Tank 4
Volatile Organic Compounds . . . . . 5 - 6
Food and Beverage 6

Organic Quote Form 7

Single Element Standards . . . . . 8 - 12

Other Standards & Analytical Reagents 13
Halide Standards for ICP-MS 13
NEW Isotopic Standards 13
Cyanide Complexes 13
Eu Pharmacopoeia Solutions 13
Acid Reagent Blanks 13
High-Purity Subboiling Distilled Acids 13

ICP Single-Element Kits 14
ICP-OES & ICP-MS Starter Kits 14

ICP Multielement Standards . . . . . 15 - 22
ICP Calibration Solutions 15
ICP Working Calibration Solutions 15
ICP Analytical Mixtures 16
Initial Check Verification Standards 17
Continuing Check Verification Standards 17
Wavelength Calibration Solution 18
Interference Check Standards 18
ICP Stock Solution 18
EPA Method 200.7 Calibration Standards 19
Quality Control Standards 20
CLP Calibration Standards 21
CLP Check Verification Standards 21
CLP Interference Check Standards 21
CLP Spike Standards 21
CLP Analyte Standards 22
CRDL Detection Limit Standard 22

USP Methods Standards 22

ICP-MS Multielement Standards . . . . . 23 - 26
ICP-MS Calibration Standards 23
Interference Check Solutions 23
ICP-MS Verification Standards 24
ICP-MS Method 6020 24
EPA Method 200.8 Calibration Standards 25
Tuning Solutions 25
ICP-MS Internal Standards 26
68-Element Standard 26

Filter Media for Hygiene & Ambient Air Analysis . . 27

AAS Solutions 28
Matrix Modifiers for Graphite Furnace 28
Ionization Buffers for Flame AAS 28

Metallo-Organic Oil Standards 29

Ion Chromatography Standards . . . . . 30 - 31
Single Component IC/ISE Standards 30
Multielement IC Standards 31
Bio IC Calibration Standards 31
Wet Chemical Standards 31

Water & Wastewater Standards . . . . . 32 - 34
Trace Metals in Drinking Water 32
Simulated Rainwater 32
Spiking Solutions for Water and Soil Samples 33
Simulated Seawater Standard in 2% HNO_3 33
Certified Wastewater - Trace Metal Solutions 34
Certified Wastewater - Nutrients Solutions 34
Certified Wastewater - Cyanide Solutions 34
Certified Wastewater - Demand Solutions 34

Natural & Simulated Matrix Reference Materials . . 35

Inorganic Quote Form 36
Custom Designed Blends 37

Organic Multicomponent Standards

- Standards for a variety of EPA, ASTM methods
- Manufactured under ISO/IEC 17025:2005 and ISO Guide 34:2009 accredited program
- Each product comes with a comprehensive Certificate of Analysis
    - o Concentration values verified against second source
    - o Chromatogram
    - o Weight report traceable to NIST

Semivolatiles

Base Neutral and Acid Surrogate Standard Mixture — Part # BNA-SURR-M6C

6 certified components in Methylene Chloride for use in EPA Method 8250A, 8270B, CLP, 625 available in 1mL ampules

Stated concentration of each component (µg/mL):

2-Fluorobiphenyl	1000	2-Fluorophenol	2000
Nitrobenzene-d5	1000	Phenol-d6	2000
p-Terphenyl-d14	1000	2,4,6-Tribromophenol	2000

Semivolatile Internal Standard Mixture — Part # SV-IS-M6C

6 certified components at 2000 µg/mL in Methylene Chloride, available in 1mL and 5 x 1mL ampules

Acenaphthene-d10	Chrysene-d12	1,4-Dichlorobenzene-d4
Naphthalene-d8	Perylene-d12	Phenanthrene-d10

Polycyclic Aromatic Hydrocarbons (PAHs) Standard Mixture — Part # PAH-HM16C

16 certified components at 2000 µg/mL in Methylene Chloride, available in 1mL and 5 x 1mL ampules

Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene
Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene
Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene

Base Neutral Extractable Mixture — Part # BN-M44C

44 certified components of Base and Neutral Organic mixture at 1000 µg/mL in Benzene:Methylene Chloride:Acetonitrile (4:4:2) for use in EPA Method 625/1625, 8270, CLP, available in 1mL ampules

Acenaphthene	Acenaphthylene	Anthracene	Azobenzene	Ben(a)anthracene
Benzo(a) pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Bis(2-chloroisopropyl)ether
2-Chloronaphthalene	Chrysene	Dibenz(a,h)anthracene	2,4-Dinitrotoluene	Fluoranthene
Fluorene	Hexachlorobenzene	Indeno(1,2,3-c,d)pyrene	Naphthalene	n-Nitrosodiphenylamine
Phenanthrene	Pyrene	Benzyl butyl phthalate	Bis(2-chloroethoxy)methane	4-Bromodiphenyl ether
Bis(2-ethylhexyl)phthalate	4-Chlorodiphenyl ether	2-Chloroethyl ether	1,2-Dichlorobenzene	1,3-Dichlorobenzene
1,4-Dichlorobenzene	2,6-Dinitrotoluene	Dibutyl phthalate	Diethyl phthalate	Dimethyl phthalate
Di-n-octyl phthalate	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Isophorone
Nitrobenzene	n-Nitrosodimethylamine	n-Nitrosodi-n-propylamine	1,2,4-Trichlorobenzene	

16 certified components of Acid Organic mixture at 2000 µg/mL in Methylene Chloride for use in EPA Method 625/1625, 8270, CLP available in 1mL ampules

Benzoic	2-Chlorophenol	4-Chloro-3-methylphenol	4,6-Dinitro-2-methylphenol	2,4-Dichlorophenol
2,4-Dimethylphenol	2,4-Dinitrophenol	2-Methylphenol	4-Methylphenol	2-Nitrophenol
4-Nitrophenol	Pentachlorophenol	Phenol	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol
2,4,6-Trichlorophenol				

Dutch 7 PCB Congeners Mixture — Part # PCB-MDC7

7 certified component PCB Congener mixture at 100 µg/mL in Isooctane, available in 1mL and 5 x 1mL ampules

2,4,4'-Trichlorobiphenyl (BZ-28)	2,2',3,4,4',5' - Hexachlorobiphenyl (BZ-138)
2,2',5,5' - Tetrachlorobiphenyl (BZ-52)	2,2',4,4',5,5' - Hexachlorobiphenyl (BZ-153)
2,2',4,5,5' - Pentachlorobiphenyl (BZ-101)	2,2',3,4,4',5,5' - Heptachlorobiphenyl (BZ-180)
2,3',4,4',5 - Pentachlorobiphenyl (BZ-118)	

HIGH-PURITY STANDARDS Visit our website at **highpuritystandards.com** or call toll free **866-767-4771**

ICP Analytical Mixtures

HPS analytical mixtures are designed to calibrate the instrument response or as a quality control check for the analysis of geological, wastewater, air particulate, soil, plant and animal tissue samples.

Catalog No.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Matrix
ICP-AM-1	Ba Ca	25 µg/mL 250	K Mg	500 µg/mL 100	Mo	50 µg/mL	Na	500 µg/mL	2% HNO_3 + Tr HF
ICP-AM-2	Ag	200	B	100	Sb	200	Tl	200	2% HNO_3 + Tr HF
ICP-AM-3	Al As Be Cd	100 50 10 100	Co Cr Cu Fe	100 100 100 50	Hg Mn Ni Pb	5 100 50 100	Se V Zn	50 100 100	2% HNO_3
ICP-AM-4	Ca Mg	100 100	Na S	100 100	Sb Se	100 100	Sn Te	100 100	20% HCl
ICP-AM-5	Al As Ba Be	100 100 100 100	Cd Co Cr Cu	100 100 100 100	Fe Mn Ni Pb	100 100 100 100	Zn	100	5% HCl
ICP-AM-6	Ag* Al B Ba Be Ca	100 100 100 100 100 100	Cd Co Cr Cu Fe K	100 100 100 100 100 100	Li Mg Mn Na Ni Pb	100 100 100 100 100 100	Sb Si Sr Tl V Zn	100 100 100 100 100 100	4% HNO_3 + Tr HF
ICP-AM-7	Ag As	1000 1000	Ba Cd	10000 250	Cr Hg*	1000 50	Pb Se	1000 250	4% HNO_3
CP-AM-11	B Mo	1000 200	Sb Si	1000 2000	Sn Ti	1000 200			4% HNO_3+1% HF
ICP-AM-12	Al As Be Cd Co	100 100 100 100 100	Cr Cu Mo Mn Ni	100 100 100 100 100	Pb Sb Se Th*	100 100 100 100	Tl U V Zn	100 100 100 100	4% HNO_3 + Tr HF *Solution B 4% HNO_3
ICP-AM-15	Ca	10000	K	10000	Mg	10000	Na	10000	5% HNO_3
ICP-AM-15-5M	Ca	5000	K	5000	Mg	5000	Na	5000	5% HNO_3
ICP-AM-15-1M	Ca	1000	K	1000	Mg	1000	Na	1000	2% HNO_3
ICP-AM-16	Ca Fe	1000 1000	K	1000	Mg	1000	Na	1000	5% HNO_3

EPA Method 200.8 Calibration Standards

Catalog No.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Matrix
ICP-200.8-1	Ag	10 µg/mL	Cd	10 µg/mL	Mo	10 µg/mL	Th	10 µg/mL	2% HNO_3+Tr HF
	Al	10	Co	10	Ni	10	Tl	10	
	As	10	Cr	10	Pb	10	U	10	
	Ba	10	Cu	10	Sb	10	V	10	
	Be	10	Mn	10	Se	10	Zn	10	
ICP-200.8-2	Ag	10 µg/mL	Cd	10 µg/mL	Mo	10 µg/mL	Th	10 µg/mL	2% HNO_3+Tr HF
	Al	10	Co	10	Ni	10	Tl	10	
	As	10	Cr	10	Pb	10	U	10	
	Ba	10	Cu	10	Sb	10	V	10	
	Be	10	Mn	10	Se	50	Zn	50	
ICP-200.8-3	Ag	20 µg/mL	Cd	20 µg/mL	Mo	20 µg/mL	Th	20 µg/mL	2% HNO_3
	Al	20	Co	20	Ni	20	Tl	20	*Solution B
	As	20	Cr	20	Pb	20	U	20	2% HNO_3+Tr HF
	Ba	20	Cu	20	Sb	20	V	20	
	Be	20	Mn	20	Se	100	Zn	20	

Tuning Solutions

Catalog No.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Matrix
ICP-MS-TS-1	Co	10 µg/mL	In	10 µg/mL	Li	10 µg/mL	Tl	10 µg/mL	2% HNO_3
ICP-MS-TS-2	Ce	10	Li	10	Tl	10	Y	10	2% HNO_3
ICP-MS-TS-3	Be	10	In	10	Mg	10	Pb	10	2% HNO_3
	Co	10							
ICP-MS-TS-4	Al	10	Bi	10	In	10	Pb	10	2% HNO_3
	Ba	10	Ce	10	Mg	10	V	10	
	Be	10	Co	10	Ni	10	Y	10	
ICP-MS-TS-5	Bi	10	In	10	Sc	10	U	10	2% HNO_3
	Ho	10	^6Li	10	Tb	10	Y	10	
ICP-MS-TS-6	Ba	10	Ce	10	In	10	Pb	10	2% HNO_3+Tr HCl
	Be	10	Co	10	Mg	10	Rh	10	
ICP-MS-TS-7	Ba	10	Co	10	Mg	10	Th	10	2% HNO_3
	Be	10	In	10	Pb	10	Tl	10	
	Ce	10							
ICP-MS-TS-8	Ba	10	Ce	10	Li	10	U	10	2% HNO_3
	Be	10	Co	10	Ni	10			
	Bi	10	In	10	Pb	10			
ICP-MS-TS-9	Al	5	Cr	5	Na	5	Tl	5	5% HNO_3
Solution A	As	20	Cu	5	Ni	10	U	5	
	Ba	5	In	5	Pb	10	V	5	
	Be	20	Lu	5	Sc	5	Y	2.5	
	Bi	5	Mg	10	Sr	5	Yb	2.5	
	Cd	20	Mn	5	Th	5	Zn	20	
	Co	5							
Solution B	Ge	10	Mo	10	Ru	10	Sn	10	10% HCl +
	Ir	5	Pd	10	Sb	10	Ti	5	1%HNO_3+TrHF
ICP-MS-TS-10	Ce	10 µg/L	Co	10 µg/L	Li	10 µg/L	Tl	10 µg/L	2% HNO_3
Note Concentration	Y	10							
ICP-MS-TS-11	Ce	10 µg/mL	Co	10 µg/mL	Li	10 µg/mL	Tl	10 µg/mL	2% HNO_3
	Y	10							

HYUNDAI MICRO

Life Science Solutions

HM HYUNDAI Micro Co.,LTD.

www.hdmicro.co.kr

pH Test-paper (Roll type)

Hyundai Micro's pH Test Papers are Easy to Handle and Measure for pH.

Features

- Easy to measure pH aqueous solution
- The colors of the scales are specially mixed to perfectly match the reaction color of the indicator papers.
  This makers the reading of results easy and accurate.

Applications

- For school materials, drainage test, process control

What is pH?

- In chemistry,pH is a measure of the acidity or basicity of an aqueous solution. Solution with a pH less than 7 are said to be acidic and solutions with a pH greater than 7 are basic or alkaline. Pure water has a pH very close to 7

pH measurement error by pH indicators

1. Buffering agent

- A buffering agent is a weak acid or base used to maintain the acidity(pH) of a solution near a chosen value after the addition of another acid or base. That is, the function of a buffering agent is to prevent a rapid change in pH when acids or bases are added to the solution.Buffering agents have variable properties some are more soluble than others; some are acidic while other are basic. As pH managers, they are important in many chemical applications, including agriculture,food processing, biochemistry and medicine.

2. Protein error

- some proteins have adsorption against pH indicator
- pH indicators have difference colors by proteins adsorption.

3. Alkaloid error

- Some alkaloids have adsorption against pH indicator
- pH indicator have difference colors by proteins adsorption

4. Others error

- Salt error is occurred when high salt concentration
- Alcohol error : alcohol,mixed liquid of organic solvent,high concentration solvent
- Unavailable for measurement when the temperature of test liquid is high
- Unavailable for measurement when solvent has much oxidation and deoxidation in it

Features

- pH indicators are supplied in plastic reels that ensure long-term stability and protection against many external influences.
- The indicator paper will always be ready-to-use when needed

UNIV "Universal" Indicator paper

- Measuring Range : pH 1~11
- pH unit graduations between each 1 unit
- Suitable for estimated measurement of pH in unknown liquid
- Easy to measure by clear color in a range of measurement

WR"Whole Range"Indicator paper

- Measuring Range : pH 1~14
- pH unit graduation : pH 1~3, pH 5~10 each unit 1 pH 3~5, pH 10~14 each unit 2
- Suitable for measurement of close to neutral colors
- Suitable for measurement of pH in unknown liquid

BCG "Bromocresol green"Indicator paper

- Measuring Range : PH 4.0~7.0
- pH unit graduations between each 0.3 unit for accurate measurement
- Use in foods and beverages due to measurement in a rage of light acid

BTB "Bromthymol blue" Indicator paper

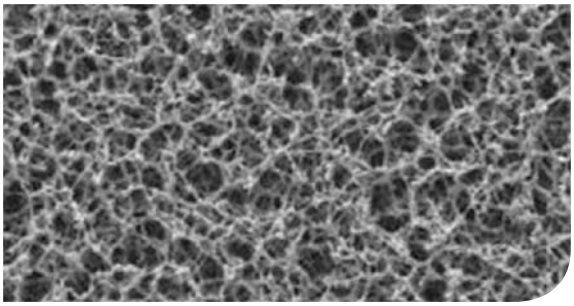
- Measuring Range : pH 6.4~8.0
- pH unit graduations between each 0.2 unit for accurate measurement
- Measurement for a range from light acids to light alkali

Ordering information

Grade		Item code	Range measurement of pH	Size
UNIV	**Universal**	HM.00001011	1-11	9mm x 6M
WR	**Whole Range**	HM.00001014	1-14	9mm x 6M
BCG	**Bromocresol green**	HM.00004070	4.0-7.0	9mm x 6M
BTB	**Bromthymol blue**	HM.00006480	6.4-8.0	9mm x 6M

MCE Membrane Filter
(Mixed Cellulose Ester)

- Mainly used for aqueous solutions (microorganism / particle experiments)
- Widely used in the general analysis or research
- Used for removal of particles and microorganism in pharmaceutical, beverage, brewing, chemical and industrial fields
- Used for filtration of very pure liquid and light scattering measurements
- A product mixed with Cellulose Acetate and Nitro Cellulose
- Available for high pressure sterilization at 121℃



Applications

- Removal of aqueous particles, filter sterilization and microorganism / particle experiments

Properties

Material	Mixed Cellulose Ester
Thickness	90 ± 10μm
Filter surface	Normal
Wettability	Hydrophilic
Bubble Point (Water)	0.2μm : 280kPa, 0.45μm : 180
Chemical compatibility	pH 3.5 – 8
Flow Rate (Water) Δ p100 kPa	0.2μm : 23ml / min / cm^2 0.45μm : 46ml / min / cm^2
Sterilization	Autoclaving (121℃), or Epoxy Ethane Suffocating

Filter setting method

- Be sure to put a dried filter on a dried filter to conduct autoclave sterilization.

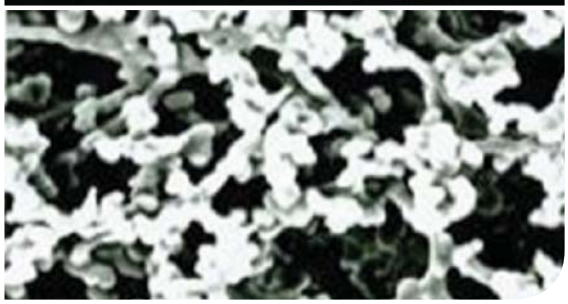
Ordering information

Materials		Model No.	Dimension (mm)	Pore Size (μm)	Packing (sheet)
MCE	Mixed Cellulose Ester	MCE02025A	Ø25	0.2μm	100
		MCE04525A		0.45μm	
		MCE02047A	Ø47	0.2μm	100
		MCE04547A		0.45μm	

★ Please apply right filter for the solvent for successful analysis.

PES Membrane filter
(Polyethersulfone)

- Excellent heat resistance and chemical resistance
- Flushed with ultrapure water
- Hydrophilic membrane, low protein adhesion, stable for alkali
- This product complies with FDA biological safety standards.
- Mainly used for aqueous solutions. Also used for biological experiments and alcohol media solvents



Applications

- Filtration of aqueous solutions / Rapid filtration of aqueous solutions such as tissues culture medium, additive and buffer, etc

Properties

Material	PES (Polyethersulfone)
Thickness	110μm (±10μm)
Filter surface	Normal
Wettability	Hydrophilic
Bubble Point (Water)	0.2μm : ≥350kPa, 0.45μm : ≥230kPa
Chemical compatibility	pH 1 – 14
Flow Rate (Water) Δp100 kPa	0.2μm : ≥21M^3 / m^2.hr.bar 0.45μm : ≥36M^3 / m^2.hr.bar
Thermal stability	Maximum allowable temperature : 130℃
Sterilization	Autoclaving (121℃), γ-ray or Epoxy Ethane Suffocating

Sterilization Validation

- Bacteria Challenge tests for bubble point values of 0.2μm membranes are conducted to ensure the stability of the sterile filtration.

Ordering information

Materials		Model No.	Dimension (mm)	Pore Size (μm)	Packing (sheet)
PES	Polyether sulfone	PES02025A	Ø25	0.2μm	100
		PES04525A		0.45μm	
		PES02047A	Ø47	0.2μm	100
		PES04547A		0.45μm	

Disposable
SYRINGE FILTER

HYUNDAI MICRO has developed Syringe Filters through R&D of 3 years the first time in Korea.

Material	Type	Application
MCE	For Hydrophilic	Filtration of general aqua-type liquid, Sterile filtration of liquids and particle removal filtration
PES	For Hydrophilic	Aqueous solutions such as culture medium of tissues and additives quickly. Low protein absorption, Optimal for biological Experiments
CA	For Hydrophilic	Low protein absorption, particle removal filtration of biochemistry water soluble Sample
NYLON	For Hydrophilic / Mild organic solvents	Excellent chemical compatibility, Used for mixed solvents, high binding protein
PVDF	For Hydrophilic / Mild organic solvents	Filtration of water soluble sample, Mild organic solvents, low binding protein
PTFE-D	For Mild organic solvents	Mild organic solvents, used as an air vent filter and filtration for gas.
PTFE-H	For Hydrophilic / Mild organic solvents	Aqua-type liquid and mixed liquid of organic solvents, Pre-filtration of mixed solvents used in HPLC

HM HYUNDAI MICRO

Tel: 02) 2273 8491 customer@hdmicro.co.kr www.hdmicro.co.kr

FILTER PAPER

Qualitative & Quantitative Filter Papers

Comparison table_ Qualitative Filter Paper

HYUNDAI MICRO	ADVANTEC	WHATMAN
No. 10	No. 1	No. 1
No. 20	No. 2 / No. 232	No. 2
No. 2	No. 2 / No. 232	No. 2
No. 100	No. 3	No. 6

Comparison table_ Quantitative Filter Paper

HYUNDAI MICRO	ADVANTEC	WHATMAN
No. 51	No. 5A	No. 41
No. 52	No. 5B	No. 40
No. 53	No. 5C	No. 42
No. 60	No. 6 / No. 4A	No. 44

HM HYUNDAI MICRO

Tel: 02) 2273 8491 customer@hdmicro.co.kr www.hdmicro.co.kr

KOREA SCIENCE

ONLINE & OFFLINE 통합 SERVICE 실시

KOREA SCIENCE의 실험기자재 전 제품을 온라인 뿐만 아니라 오프라인을 통해 물품을 공급받고 관리를 받음 으로써, 연구과제를 수행하는 데 있어서 보다 원활히 할 수 있도록 SERVICE를 지원하고 있습니다.

고객중심의 WEBSITE OPEN

KOREA SCIENCE의 LAB Total Solutions정책을 기반으로 KOLAB 종합쇼핑몰은 다른 쇼핑몰과 비교하여 고객의 편의사항을 대폭 강화하였습니다.

* KOREA SCIENCE HOMEPAGE : www.korea-science.com
* KOLAB 종합 쇼핑몰 : www.Kolab-shop.com

고객중심의 SERVICE 제공

KOREA SCIENCE는 고객들과의 직접 대면을 통해 실험을 하는 데 있어서의 불편함을 감소시키고, 장비 A/S를 직접 해결해드립니다.
또한, 연구실 재고관리시스템을 도입으로 연구실 내의 연구소모품들을 직접 체크하고 관리하여 연구과제를 원활히 할 수 있도록 최대한의 노력을 하고 있습니다.

범용/이화학기기
Heating Mantles & Pipets etc.

클린룸 용품
방진복, 방진화, Sticky Mat etc.

초자류범용/이화학기기
Duran, Corning, Iwaki Glass etc.

전용기기/분석&측정
Analysis preprocessing, Pumps, Tissue Grinder etc.

안전/보호용품
LATEX, NITRILE GLOVE, Kim-Tech etc.

실험기기&가구
Crucibles & Furniture etc.

실험실 소모품
Vial, Aspirators, Needle, Conical Tube, Cell Culture Plate, Petri dish etc.

사무/일반용품
Timer, Tools, Office Supplies, Grease/Lubricant etc.

코리아 사이언스, KOREA SCIENCE COMPANY
Main Office : 경기도 안양시동안구 엘에스로 76, 디오밸리 603호
TEL : 1661-4544 FAX : 02)2139-1102 E-mail : info@korea-sci.com
SITE : www.korea-science.com / www.kolab-shop.com

OHAUS SPL SPL LIFE SCIENCES REAGENTS DUKSAN ADVANTEC 유한킴벌리 eppendorf SCHOTT DURAN

㈜코리아사이언스
The main office. 경기도 안양시 동안구 엘에스로 76
디오밸리 가동 603호
Phone. 1661-4544 / Fax. 02-2139-1102
E-mail. info@korea-sci.com

Product. 1

SAFEPLUS Latex glove

Cat No.	Brand	Description	Unit
G.SPLG	SAFEPLUS	특 징 : 비멸균, 미 분말 처리되었으며 양손잡이용임 깔끔한 마무리와 섬세한 촉감으로 착용감이 뛰어남 총 단백질 함유량 테스트를 위한 ASTM D5712- 95 Modified Lowry Test Method 사용 -> 저 단백질 수준으로 평가됨(최대 2백 마이크로 그램) Texture 바닥처리로 미끄러움이 덜하고 그립감이 좋음 노화 전 인장강도 21Mpa 파단시 신장 700% 노화 후 인장강도 16Mpa 파단시 신장 500% Size : **X-S, S, M, L, X-L** / Thickness : 5mil Length : 10inch / Powder free / Made in Malaysia	100PCS/ 10CS / Box

Product. 2

Arsoft Nitrile glove

Cat No.	Brand	Description	Unit
G.SPLG	Arsoft	특 징 : 비멸균, 미 분말 처리되었으며 양손잡이용임 100% 나이트릴, 합성 코폴리머 성분 라텍스, 단백질 미함유(라텍스로 인한 알레르기 방지) 착용시 뛰어난 밀착감으로 섬세한 작업 가능함 천연 고무나 비닐 글러브 보다 3배 강화된 성능으로 쉽게 찢어지지 않음 다양한 종류의 화학약품에 대한 내성이 강함 Size : **X-S, S, M, L, X-L** / Thickness : 5mil Length : 10inch / Powder free / Made in Malaysia	100PCS/ 10CS / Box

㈜코리아사이언스
The main office. 경기도 안양시 동안구 엘에스로 76
디오밸리 가동 603호
Phone. 1661-4544 / Fax. 02-2139-1102
E-mail. info@korea-sci.com

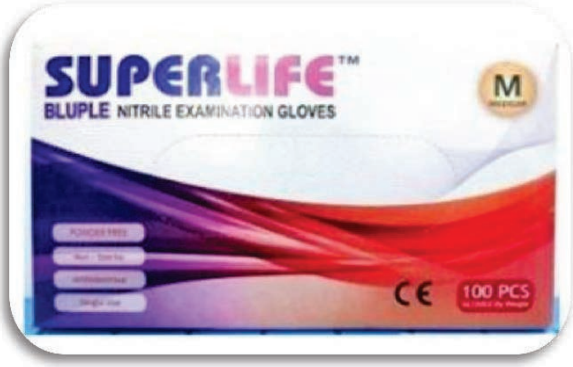
Product. 3

SUPERLIFE Latex glove
(MicroFlex사 대체품 추천)

Cat No.	Brand	Description	Unit
G.SLLG	SUPERLIFE	특 징 : 비멸균, 미 분말 처리되었으며 양손잡이용임 미끄럼 방지용 다이아몬드 그립이 있음 착용시 밀착력이 뛰어나며 섬세한 작업수행에 좋음 일반 라텍스 글러브 보다 3배 더 강화된 성능으로 쉽게 구멍이 생기거나 찢어지지 않음 100% 라텍스 성분임 Size : **X-S, S, M, L** / Thickness : 6mil Length : 10inch / Powder free / Made in Malaysia	100PCS/ 10CS / Box

Product. 4

SUPERLIFE Nitrile glove
(MicroFlex사 대체품 추천)



Cat No.	Brand	Description	Unit
G.SLLG	SUPERLIFE	특 징 : 비멸균, 미 분말 처리되었으며 양손잡이용임 100% 나이트릴, 합성 코폴리머 성분 라텍스, 단백질 미함유(라텍스로 인한 알레르기 방지) 착용시 뛰어난 밀착감으로 섬세한 작업 가능함 천연 고무나 비닐 글러브 보다 3배 강화된 성능으로 쉽게 찢어지지 않음 다양한 종류의 화학약품에 대한 내성이 강함 Size : **S, M, L** / Thickness : 6mil Length : 10inch / Powder free / Made in Malaysia	100PCS/ 10CS / Box

㈜코리아사이언스
The main office. 경기도 안양시 동안구 엘에스로 76
디오밸리 가동 603호
Phone. 1661-4544 / Fax. 02-2139-1102
E-mail. info@korea-sci.com

Product. 5

SKINNY FACE MASK

(덴탈 마스크- 의료 및 일반 겸용/ 유한킴벌리 덴탈 마스크 대체품)

Cat No.	Brand	Description	Unit
M.SFM	SKINNY	특 징 : 3중 구조 디자인으로 박테리아 세균 차단효과 뛰어난 공기 투과성, 편안한 착용감 **색상은 블루, 핑크, 화이트**로 구성됨 **의료용 마스크** Size : Free(180*90) / Made in Vietnam	50PCS/ 50CS / Box

LOBA Chemie

LABORATORY REAGENTS & FINE CHEMICALS

GET, SET, GO....

A LEADER AT YOUR SERVICE

ABOUT US

We are manufacturers of reagents for laboratory analysis and chemical products for industrial use by the pharmaceutical, foodstuff, chemical, research & development sectors, hospitals and universities. We manufacture over 4,000 organic and inorganic analytical reagents and speciality chemical. We have most chemicals needed for laboratory, bench, analytical, quality control, materials characterization, scientific or research work. Over 40 years of experience in our sector guarantees the service that only a leader can offer as well as the largest range of laboratory reagents and industrial chemicals. Through our commitment to quality, we aim to satisfy the needs of our customers, whilst safeguarding the health and safety of our employees, respecting the environment and managing and guaranteeing the quality of our processes, services and products.

WHAT WE OFFER

- Offers the largest range of chemistries
- High quality products
- In stock & ready for same-day shipping
- Competitive pricing
- Wide range of innternational packing
- Research & bulk quantities available
- Expert chemists and Staff for support

ACCESS THE LATEST INFORMATION

www.lobachemie.com

Our redesigned website provides easy access to our offerings to your desk, 24 hours a day, 7 days a week, 365 days a year.

SEARCH CHEMICALS BY

- Chemical Name
- Synonym
- Catalog Number
- CAS Number
- Batch Number
- Grade of Chemical

STAY CONNECTED

- Request the Latest Literature and Catalogs
- Download Lot-Specific Certificate of Analysis
- Download (Material) Safety Data Sheets
- View Current Product Specifications
- Up-to-date product availability

LAB APPLICATION

† Analytical reagents

Reagents especially indicated for general analytical applications with guaranteed specifications.

† Reagents and Solvents for instrumental analysis

High purity reagents specifically designed to be used in the following instrumental techniques:
UV-IR, HPLC (gradient), IR,
Analysis of pesticide residues
Derivitization reagents for gas chromatography

† Reagents for volumetric analysis

Ready -to-use volumetric solutions
and Concentrated volumetric solutions
Traceable to NIST
Indicator solutions
AQUAMETRIC (Pyrdine-free Karl Fischer reagents)
Ready -to-use buffer solutions
and Concentrated buffer solutions

† Reagents and Solvents for general application

Products of a suitable purity to be used as auxiliary reagents.
Chemically pure Products of controlled purity
for general purposes in laboratory and industry.

† Reagents and Solvents for specific application

Products of chemistry practice at School
Clinical diagnosis, Reagents for histological techniques, haematology and microbiology.
Products for biochemistry, Laboratory glassware cleaning detergents and disinfectants.
pH indicator papers.

† Reagents and Solvents for organic synthesis

Dry Solvents
Solvents and reagents for biosynthesis

INDUSTRIAL APPLICATION

† Products and solutions that meet the purity & requirements for products to be used in the pharmaceutical industry according to :

Indian Pharmacopoeia (IP)
British Pharmacopoeia (BP)
United States Pharmacopoeia (USP)
European Pharmacopoeia (Ph. Eur.).

PRODUCT HIGHLIGHT

- AAS STANDARD SOLUTIONS (traceable to NIST)
- ACIPUR-REAGENTS FOR TRACE METAL ANALYSIS
- ADSORPTION INDICATOR
- AGAROSE
- ALBUMINS
- AMINO ACIDS & DERIVATIVES
- BUFFER CONCENTRATE SOLUTIONS
- BUFFER SOLUTIONS (Ready to Use)
- BUFFER TABLETS
- CARBOHYDRATES
- GC-HS SOLVENTS FOR GC-HEADSPACE ANALYSIS
- CLINICAL/ DIAGNOSTIC REAGENTS
- COLUMN & THIN LAYER CHROMATOGRAPHIC REAGENT
- CONCENTRATE VOLUMETRIC SOLUTIONS (AMPOULE PACKING)
- CONCENTRATE VOLUMETRIC SOLUTIONS (traceable to NIST)
- CONDUCTIVITY STANDARDS (traceable to NIST)
- DYES & STAIN
- ENZYMES
- GOOD'S BUFFER
- HPLC BUFFER SALTS
- HPLC, SPECTROSCOPY GRADE SOLVENTS
- ICP STANDARD SOLUTIONS (traceable to NIST)
- INORGANIC PHOSPHATES
- ION PAIRING REAGENTS FOR HPLC
- METAL & ITS SALT
- NANOPOWDER & CARBON NANOTUBES
- NUCLEOSIDES, NUCLEOTIDES & DNA
- PESTICIDE RESIDUE SOLVENTS
- pH INDICATOR PAPERS
- pH INDICATORS (SOLIDS)
- pH INDICATOR SOLUTIONS
- PHARMA GRADE PRODUCTS
- PROTEINS/PROTEINS DERIVATIVES
- QUATERNARY AMMONIUM COMPOUNDS
- REAGENTS FOR MOLECULAR BIOLOGY
- REDOX INDICATOR
- SOLVENTS FOR GAS CHROMATOGRAPHY
- STAINING SOLUTIONS
- VOLUMETRIC STANDARD SOLUTIONS (traceable to NIST)

Biochemical Reagents

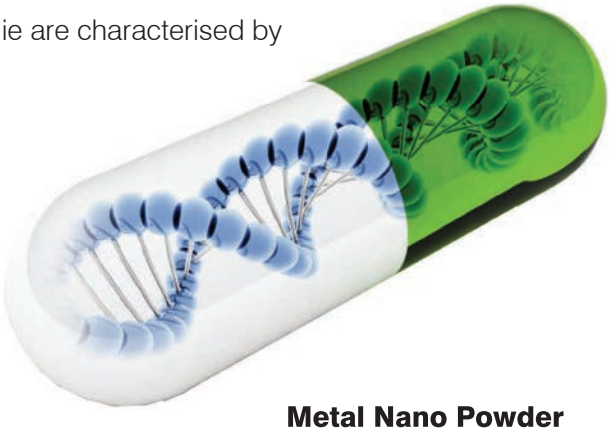
A diverse range of specifically developed high end biochemical reagents

- AGAROSE
- ALBUMINS
- CARBOHYDRATES
- ENZYMES
- AMINO ACIDS
- NUCLEOSIDES, NUCLEOTIDES AND DNA
- PROTEINS / PROTEIN DERIVATIVES
- CULTURE MEDIA ADDITIVE
- GOOD'S BUFFER (BIOLOGICAL BUFFERS)
- REAGENTS FOR MOLECULAR BIOLOGY

NANOPOWDER & CARBON NANOTUBES (CNT'S)

The Nanopowder and Carbon Nano Tubes offered by Loba Chemie are characterised by

- Nanophase Particle Attributes
- Particles less than 100 nanometers
- Particles are equi-axed
- High surface and chemical purity



Single Walled Carbon Nanotubes

Product Name	Code	Pkg	Price
SWCNT (High Purity, OD:1-2nm, >98wt%) Average Length: 3-8um	**N0001** 0250M N0001 00001	250 mg 1g	14750 36600
SWCNT (High Purity, OD:1-2nm, >98wt%) Average Length: 8-15nm	**N0005** 0250M N0005 00001	250 mg 1g	15900 43260
SWCNT (High Purity, OD:1-2nm, 90-95wt%) Average Length: 15-30nm	**N0010** 0250M N0010 00001	250 mg 1g	14500 37500
SWCNT OH (Surface Modified, OH:2-4Wt%, OD:1-2nm, >98wt%) Average Length: 3-8nm	**N0015** 0250M N0015 00001	250 mg 1g	28750 60600
SWCNT COOH (Modified, COOH:2-4Wt%, OD:1-2nm, >98wt%) Average Length: 3-8nm	**N0020** 0250M N0020 00001	250 mg 1g	34800 74100
SWCNT COOH (Modified, COOH:2-4Wt%, OD:1-2nm, 90-95wt%) Average Length: 5-15nm	**N0025** 0250M N0025 00001	250 mg 1g	26500 61000
SWCNT NH_2 (Modified, NH2: 2-3Wt%, OD:1-2nm, >98wt%) Average Length: 3-8nm	**N0030** 0250M N0030 00001	250 mg 1g	47500 120000

Metal Nano Powder

Product Name	Code	Pkg	Price
Copper Nanopowder (Cu, 99%, metal basis) APS: 80-100nm	**N0035** 00005	5 g	15500
Diamond Nanopowder (C, >98%) APS:3-10nm	**N0040** 00005	5g	24000
Nickel Nanopowder (Ni , 99%, Metal Basis) APS:<80nm	**N0045** 00005	5g	20000
Silicon Nanopowder (Si, 99+% , Monocrystolline) APS: <100nm	**N0050** 00005	5g	20000
Silver Nanopowder (Ag, 99%, metal basis) APS: 80-100nm	**N0055** 00005	5g	17000
Tantalum Nanopowder (Ta, High Purity, 99.99%, metal basis) APS:50-80nm	**N0060** 00005	5g	31500
Tungsten Nanopowder (W, 99.95+% ,metal basis) APS:<70nm	**N0065** 00005	5g	27000
Zinc Nanopowder (Zn, High Purity, 99.99% , metal basis) APS:30-60nm	**N0070** 00005	5g	17500

GMP & Validation Service

복잡하고 다양한 실험을 진행해야 하는 **첨단 연구자**들에게
정확하고 믿을 수 있는 장비는 무엇보다 중요한 필수조건입니다.
비전과학 주식회사는 여러분이 기대하시는
IQ/OQ와 **GMP**관련 **Validation Service**를 제공하고 있습니다.

비전과학 주식회사

TEL : 032-672-3091(대표)
FAX : 032-672-3098
e-mail : info@visionbionex.com
경기도 부천시 오정구 삼작로 121번길 33

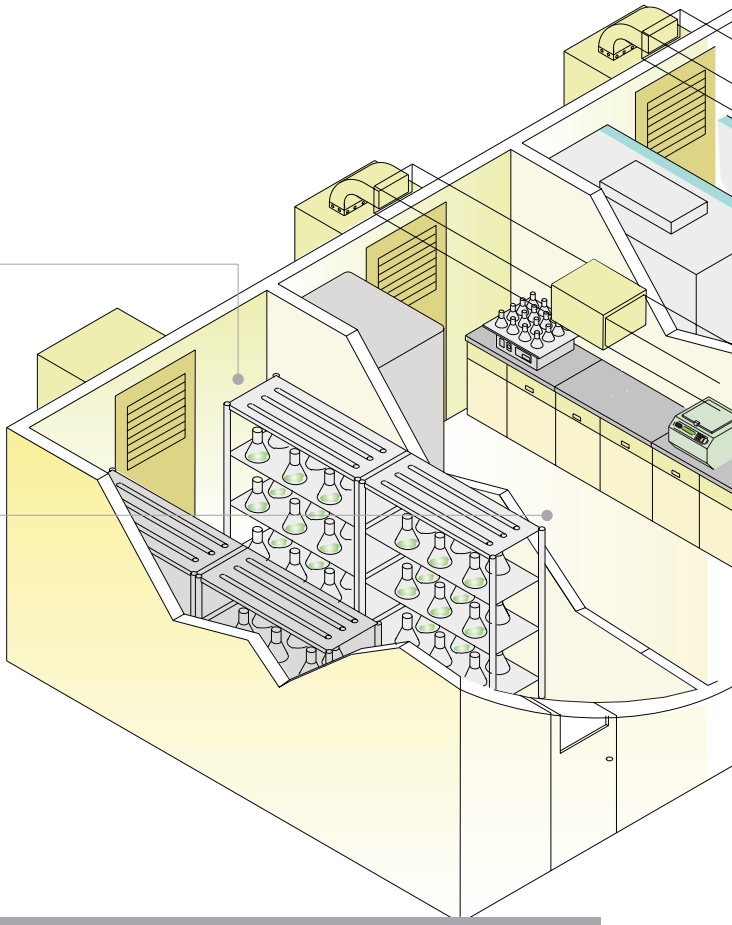
www.visionbionex.com

VISION

Laboratory Lay-out

보다 새롭고 혁신적인 실험실을 원하신다면 비전과학 주식회사에 문의해 주십시오.
소모품 하나 하나까지 Total Service 해드리며 우수한 품질을 최적의 조건으로 제공해 드리겠습니다.
더불어 지속적인 유지보수와 신뢰할 수 있는 After Service 또한 보장 받으실 수 있습니다.

상 담	• 비전과학 주식회사의 전문가들이 직접 고객님께 방문하여 필요한 사항들을 수집합니다.
조 사	• LAB의 상황 파악 및 상담을 통한 내용을 분석하고 기획안을 제시해 드립니다.
설 계	• 합의 된 기획안을 토대로 기본 설계를 작성한 후 검증을 거쳐 실시 설계를 완성합니다.
시공 / 제작	• 철저한 품질관리를 통해 전문인력이 시공하며, 필요한 제품을 제작 및 구매합니다.
완성 / 검사	• 제작 완료 후 반복검사를 통해 이상 유무를 철저히 검사합니다.
보수 / 관리	• 지속적으로 보수, 관리해 드리며 신속한 A/S를 제공해 드립니다.



Culture Room

Multi Shaker

Growth Shelf

Growth Room

BOD Incubator

Shaking Incubator

Shaker

Table-top Centrifuge

Circulation Water Bath

Centra-Vac

Preparation Room

Cold lab Chamber

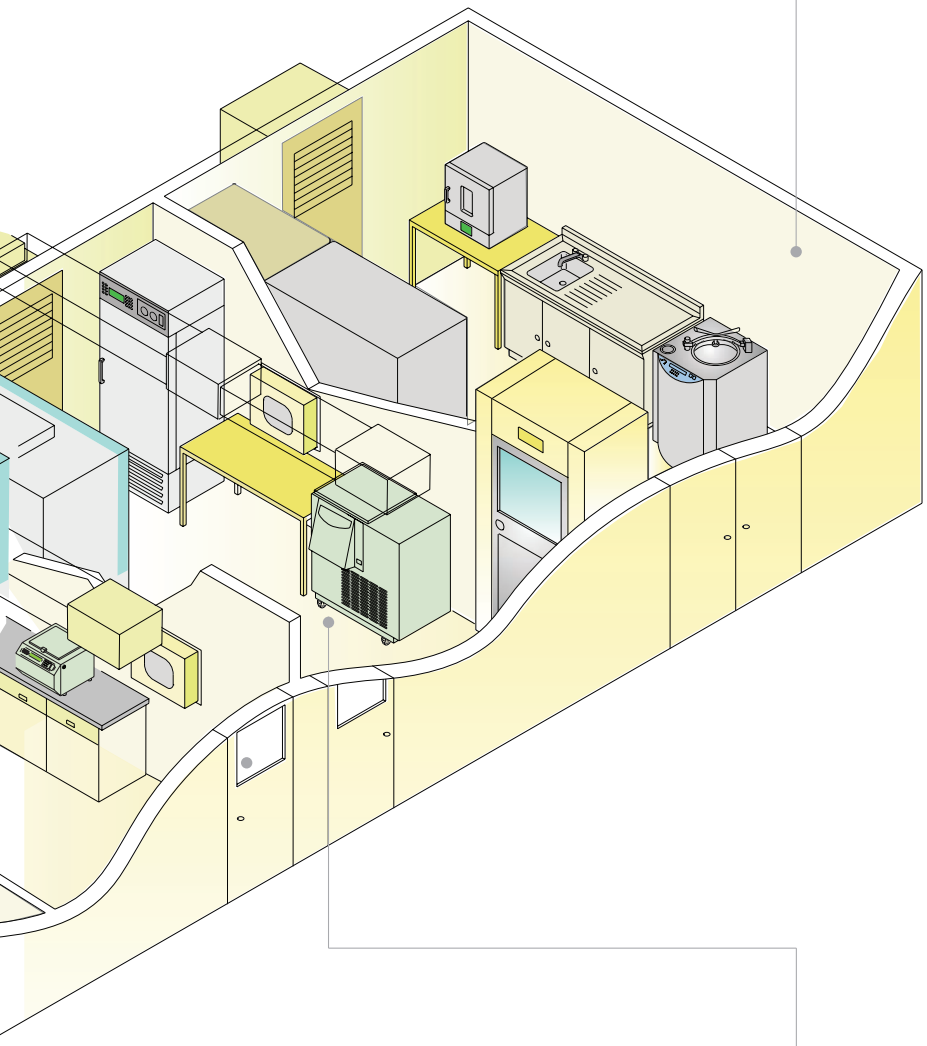
Lab Freezer

Drying Oven

Autoclave

Ice Maker

High-speed
Refrigerated Centrifuge



조직배양 Clean Room

Plant Growth Chamber

Bio-hazard Safety Cabinet

CO_2 Incubator

Refrigerated Centrifuge

Twin Room Incubator

Atomic weight

❶ 원자량은 12C의 원자질량 12를 기준으로한 값임. ❷ 한글이름은 "대한화학회명명법"에 의해 작성한 것임.

영문이름	한글이름	원소기호	원소번호	원자량
Actinium	악티늄	Ac	89	227.0278
Aluminium	알루미늄	Al	13	26.981539
Americium	아메리슘	Am	95	243.0614
Antimony	안티모니	Sb	51	121.757
Argon	아르곤	Ar	18	39.948
Arsenic	비소	As	33	74.92159
Astatine	아스타틴	At	85	219.9871
Barium	바륨	Ba	56	137.327
Berkelium	버클륨	Bk	97	247.0703
Beryllium	베릴륨	Be	4	9.012182
Bismuth	비스무트	Bi	83	208.98037
Bohrium	보륨	Bh	107	270.125
Boron	붕소	B	5	10.811
Bromine	브로민	Br	35	79.904
Cadmium	카드뮴	Cd	48	112.411
Caesium	세슘	Cs	55	132.90543
Calcium	칼슘	Ca	20	40.079
Californium	칼리포늄	Cf	98	251.080
Carbon	탄소	C	6	12.011
Cerium	세륨	Ce	58	140.119
Chlorine	염소	Cl	17	35.4527
Chromium	크로뮴	Cr	24	51.9961
Cobalt	코발트	Co	27	58.93320
Copper	구리	Cu	29	63.546
Curium	퀴륨	Cm	96	247.0703
Dubnium	더브늄	Db	105	268.113
Dysprosium	디스프로슘	Dy	66	162.50
Einsteinium	아인슈타인늄	Es	99	252.083
Erbium	어븀	Er	68	167.26
Europium	유로퓸	Eu	63	151.965
Fermium	페르뮴	Fm	100	257.0951
Fluorine	플루오린	F	9	18.9984032
Francium	프랑슘	Fr	87	223.020
Gadolinium	가돌리늄	Gd	64	157.25
Gallium	갈륨	Ga	31	69.723
Germanium	저마늄	Ge	32	72.61
Gold	금	Au	79	196.96654
Hafnium	하프늄	Hf	72	178.49
Hassium	하슘	Hs	108	277.134
Helium	헬륨	He	2	4.002602
Holmium	홀뮴	Ho	67	164.93032
Hydrogen	수소	H	1	1.00794
Indium	인듐	In	49	114.818
Iodine	아이오딘	I	53	126.90447
Iridium	이리듐	Ir	77	192.22
Iron	철	Fe	26	55.847
Krypton	크립톤	Kr	36	83.80
Lanthanum	란타넘	La	57	138.9055
Lawrencium	로렌슘	Lr	103	262.110
Lead	납	Pb	82	207.2
Lithium	리튬	Li	3	6.941
Lutetium	루테튬	Lu	71	174.967
Magnesium	마그네슘	Mg	12	24.3050
Manganese	망가니즈	Mn	25	54.93805
Meitnerium	마이트너륨	Mt	109	276.139

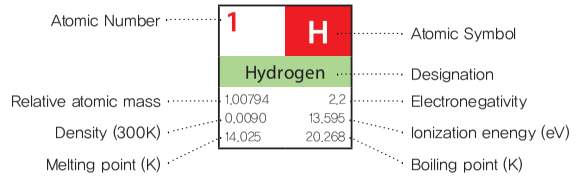
영문이름	한글이름	원소기호	원소번호	원자량
Mendelevium	페르뮴	Md	101	258.10
Mercury	수은	Hg	80	200.59
Molybdenum	몰리브데넘	Mo	42	95.94
Neodymium	네오디뮴	Nd	60	144.24
Neon	네온	Ne	10	20.1797
Neptunium	넵투늄	Np	93	237.0482
Nickel	니켈	Ni	28	58.6934
Niobium	나이오븀	Nb	41	92.90638
Nitrogen	질소	N	7	14.00674
Nobelium	노벨륨	No	102	259.1009
Osmium	오스뮴	Os	76	190.23
Oxygen	산소	O	8	15.9994
Palladium	팔라듐	Pd	46	106.42
Phosphorus	인	P	15	30.973762
Platinum	백금	Pt	78	195.08
Plutonium	플루토늄	Pu	94	244.0642
Polonium	폴로늄	Po	84	208.9824
Potassium	포타슘	K	19	39.0983
Praseodymium	프라세오디뮴	Pr	59	140.90768
Promethium	프로메튬	Pm	61	144.9127
Protactinium	프로탁티늄	Pa	91	231.03588
Radium	라듐	Ra	88	226.0254
Radon	라돈	Rn	86	222.0176
Rhenium	레늄	Re	75	186.207
Rhodium	로듐	Rh	45	102.90550
Rubidum	루비듐	Rb	37	85.4678
Ruthenium	루테늄	Ru	44	101.07
Rutherfordium	러더포듐	Rf	104	267.113
Samarium	사마륨	Sm	62	150.36
Scandium	스칸듐	Sc	21	44.955910
Seaborgium	시보귬	Sg	106	271.122
Selenium	셀레늄	Se	34	78.96
Silicon	규소	Si	14	28.0855
Silver	은	Ag	47	107.8682
Sodium	소듐	Na	11	22.989768
Strontium	스트론튬	Sr	38	87.62
Sulfur	황	S	16	32.066
Tantalum	탄탈럼	Ta	73	180.9479
Technetium	테크네튬	Tc	43	97.9072
Tellurium	텔루륨	Te	52	127.60
Terbium	터븀	Tb	65	158.92534
Thallium	탈륨	Tl	81	204.3833
Thorium	토륨	Th	90	232.0381
Thulium	툴륨	Tm	69	168.93421
Tin	주석	Sn	50	118.710
Titanium	타이타늄	Ti	22	47.88
Tungsten	텅스텐	W	74	183.84
Uranium	우라늄	U	92	238.029
Vanadium	바나듐	V	23	50.9415
Xenon	제논	Xe	54	131.29
Ytterbium	이터븀	Yb	70	173.04
Yttrium	이트륨	Y	39	88.90585
Zinc	아연	Zn	30	65.39
Zirconium	지르코늄	Zr	40	91.224

Periodic Table of the Elements

DUKSAN Pure Chemicals

Group

Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1 H Hydrogen 1.00794 2.2 0.0090 13.595 14.025 20.268																	2 He Helium 4.00260 – 0.178 24.587 0.95 4.315
2	3 Li Lithium 6.941 1.0 0.53 5.392 453.7 1615	4 Be Beryllium 9.012182 1.5 1.85 9.322 1560 2745											5 B Boron 10.811 2.0 2.34 8.298 2300 4275	6 C Carbon 12.011 3.1 2.62 14.534 4100 4470	7 N Nitrogen 14.0067 3.1 1.25 13.618 63.14 77.35	8 O Oxygen 15.9994 3.5 1.43 13.618 50.35 90.18	9 F Fluorine 18.99840 4.1 1.70 17.422 53.48 84.95	10 Ne Neon 20.1797 – 0.90 21.564 24.55 27.10
3	11 Na Sodium 22.98976 1.0 0.97 5.1399 371 1156	12 Mg Magnesium 24.3050 1.5 1.74 7.646 922 1363											13 Al Aluminium 26.98153 1.9 2.70 5.986 933 2793	14 Si Silicon 28.0855 1.7 2.33 8.151 1685 3540	15 P Phosphorus 30.9738 2.1 1.82 10.486 317.3 550	16 S Sulfur 32.066 2.4 2.07 10.360 388.4 717.8	17 Cl Chlorine 35.453 2.8 3.17 12.967 172.1 239.1	18 Ar Argon 39.948 – 1.78 15.759 83.8 87.3
4	19 K Potassium 39.0983 0.9 0.86 4.341 371 1156	20 Ca Calcium 40.078 1.0 1.55 6.113 1112 1757	21 Sc Scandium 44.95591 1.2 3.0 6.54 1812 3104	22 Ti Titanium 47.88 1.3 4.50 6.82 1943 3562	23 V Vanadium 50.9415 1.5 5.8 6.74 2175 3682	24 Cr Chromium 51.9961 1.6 7.19 6.766 2130 2945	25 Mn Manganese 54.9380 1.6 7.43 7.435 1517 2335	26 Fe Iron 55.847 1.6 7.86 7.840 1809 3135	27 Co Cobalt 58.9332 1.7 8.90 7.864 1768 3201	28 Ni Nickel 58.6934 1.8 8.90 7.635 1726 3187	29 Cu Copper 63.546 1.8 8.96 7.726 1357.6 2836	30 Zn Zinc 65.39 1.7 7.14 9.394 692.7 1180	31 Ga Gallium 69.723 1.8 5.91 5.999 302.9 2478	32 Ge Germanium 72.59 2.0 5.32 7.899 1210.4 3107	33 As Arsenic 74.92159 2.2 5.72 9.81 subl. 886	34 Se Selenium 78.96 2.5 4.80 9.752 494 958	35 Br Bromine 79.904 2.7 3.12 11.814 265.9 332.2	36 Kr Krypton 83.798 – 3.74 13.999 115.8 119.8
5	37 Rb Rubidium 85.4678 0.9 1.53 4.1175 312.6 961	38 Sr Strontium 87.62 1.0 2.60 5.695 1041 1650	39 Y Yttrium 88.9058 1.1 4.5 6.38 1799 3611	40 Zr Zirconium 91.224 1.2 6.49 6.84 2125 4682	41 Nb Niobium 92.9063 1.2 8.55 6.88 2740 5017	42 Mo Molybdenum 95.942 1.3 10.2 7.099 2890 4912	43 Tc Technetium 97.907 1.4 11.5 7.28 2473 4538	44 Ru Ruthenium 101.07 1.4 12.2 7.37 2523 4423	45 Rh Rhodium 102.906 1.5 12.4 7.46 2236 3970	46 Pd Palladium 106.42 1.4 12.0 8.34 1825 3237	47 Ag Silver 107.8682 1.4 10.5 7.576 1234 2436	48 Cd Cadmium 112.412 1.5 8.65 8.993 594.2 1040	49 In Indium 114.818 1.5 7.31 5.786 429.8 2346	50 Sn Tin 118.710 1.7 7.30 7.344 505.0 2876	51 Sb Antimony 121.760 1.8 6.68 8.641 904 1860	52 Te Tellurium 127.60 2.0 6.24 9.009 722.7 1261	53 I Iodine 126.905 2.2 4.92 10.451 386.7 458.4	54 Xe Xenon 131.29 – 5.89 12.130 161.3 165.0
6	55 Cs Cesium 132.9054 0.9 1.87 3.894 301.5 944	56 Ba Barium 137.327 1.0 3.5 5.212 1002 2171	* Lanthanides	72 Hf Hafnium 178.49 1.2 13.1 7.0 2500 4876	73 Ta Tantalum 180.947 1.3 16.6 7.89 3287 5731	74 W Tungsten 183.84 1.4 19.3 7.98 3680 5828	75 Re Rhenium 186.207 1.5 21.0 7.88 3453 5869	76 Os Osmium 190.233 1.5 22.4 8.7 3300 5285	77 Ir Iridium 192.217 1.6 22.5 9.1 2716 4701	78 Pt Platinum 195.08 1.4 21.4 9.0 2045 4100	79 Au Gold 196.967 1.4 19.3 9.225 1337.6 3130	80 Hg Mercury 200.59 1.9 13.53 10.437 234.2 630	81 Tl Thallium 204.383 1.4 11.8 6.108 577 1746	82 Pb Lead 207.210 1.6 11.4 7.416 600.6 2023	83 Bi Bismuth 208.9803 1.7 9.8 7.289 544.5 1837	84 Po Polonium 208.982 1.8 9.4 8.42 527 1235	85 At Astatine 219.987 2.0 – 9.5 575 610	86 Rn Radon 222.018 – 9.9 10.748 202 211
7	87 Fr Francium 223.020 0.9 – – 300 950	88 Ra Radium 226.025 1.0 5 5.279 973 1809	* * Actinides	104 Rf Rutherfordium 267.113 – – – – –	105 Db Dubnium 268.114 – – – – –	106 Sg Seaborgium 271.122 – – – – –	107 Bh Bohrium 270.125 – – – – –	108 Hs Hassium 277.134 – – – – –	109 Mt Meitnerium 276.139 – – – – –	110 Ds Darmstadtium 281.146 – – – – –	111 Rg Roentgenium 280.154 – – – – –	112 Cn Copernicium 285 – – – – –	113 Uut Ununquadium 284 – – – – –	114 Uuq Ununquadium 289 – – – – –	115 Uup Ununpentium 288 – – – – –	116 Uuh Ununhexium 293 – – – – –	117 Uus Ununseptium 292.2 – – – – –	118 Uuo Ununoctium 293.2 – – – – –



* Lanthanides ▶	57 La Lanthanum 138.906 1.1 6.7 5.577 1193 3730	58 Ce Cerium 140.116 1.1 6.78 5.47 1071 3699	59 Pr Praseodymium 140.907 1.1 6.77 5.42 1204 3785	60 Nd Neodymium 144.24 1.1 7.0 5.49 1289 3341	61 Pm Promethium 144.913 1.1 6.47 5.55 1204 3785	62 Sm Samarium 150.36 1.1 7.54 5.63 1345 2064	63 Eu Europium 151.964 1.0 5.26 5.67 1090 1870	64 Gd Gadolinium 157.25 1.1 7.89 6.14 1585 3539	65 Tb Terbium 158.925 1.1 8.27 5.85 1630 3496	66 Dy Dysprosium 162.50 1.1 8.54 5.93 1685 2835	67 Ho Holmium 164.930 1.1 8.80 6.02 1743 2968	68 Er Erbium 167.259 1.1 9.05 6.10 1795 3136	69 Tm Thulium 168.934 1.1 9.33 6.18 1818 2220	70 Yb Ytterbium 173.055 1.1 6.98 6.254 1097 1467	71 Lu Lutetium 174.961 1.1 9.84 5.426 1936 3668
* * Actinides ▶	89 Ac Actinium 227.028 1.0 10.0 6.9 1323 3473	90 Th Thorium 232.038 1.1 11.7 6.95 2028 5061	91 Pa Protactinium 231.036 1.1 15.4 – – –	92 U Uranium 238.029 1.2 18.9 6.08 1405 4407	93 Np Neptunium 237.048 1.2 20.4 – 910 –	94 Pu Plutonium 244.064 1.2 19.8 5.8 913 3503	95 Am Americium 243.061 1.2 13.6 6.0 1268 2880	96 Cm Curium 247.070 1.2 13.5 – 1340 –	97 Bk Berkelium 247.070 1.2 – – – –	98 Cf Californium 251.080 1.2 – – – –	99 Es Einsteinium 252.083 1.2 – – – –	100 Fm Fermium 257.095 1.2 – – – –	101 Md Mendelevium 258.098 1.2 – – – –	102 No Nobelium 259.101 – – – – –	103 Lr Lawrencium 262.110 – – – – –

Atomic number & Eliment Symbol colors show state at standard temperature and pressure (0 °C and 1 atm)

Solids | Liquids | Gases | Unknown

Element categories in the periodic table

Alkali metals	Alkaline earth metals	Lanthanides	Actinides	Transition elements
Other metals	Metalloids	Other nonmetals	Halogens	Noble gases

Borders show natural occurrence

Primordial | From decay | Synthetic | (Undiscovered)

Reagent & Chemicals
2015 - 2016

DUKSAN
PURE CHEMICALS
URL Address http://www.duksan.kr
E-mail Address Webmaster@duksan.kr

HEAD OFFICE : 53, Sinwon-ro 133beongil, Danwon-gu, Ansan-si, Gyeonggi-do, Korea
TEL : +82-31-495-4055 FAX : +82-31-495-4058