

■ Rare earth metal & Rare metal compounds (희토류 금속과 희소금속 화합물)

희토류는 화학적으로 매우 안정하고, 열에 잘 견디며, 열을 잘 전도하는 특징이 있으며 화학적, 전기적, 자성적, 발광적 성질을 가지고 있습니다. 희토류는 영구자석, LCD, LED, 전자제품, 형광램프, 광섬유, 원자로 제어제 등에 널리 사용됩니다.

당사는 아래 제품의 Carbonates, Fluorides, Acetates, Oxalates, Phosphates, Hydroxides 희토류, 희소금속 화합물도 공급하고 있습니다.

Product name	Assay	Packing
Cerium(III) chloride heptahydrate	99.9%	25g, 500g
Cerium(III) nitrate hexahydrate	99.9%	25g, 500g
Cerium(III) sulfate octahydrate	99.9%	25g
Cerium(IV) sulfate tetrahydrate	99.9%	25g, 500g
Cerium(IV) oxide	99.95%	25g, 500g
Dysprosium(III) oxide	99.9%	25g
Erbium(III) oxide	99.9%	25g
Europium(III) nitrate hexahydrate	99.9%	25g, 100g
Europium(III) oxide	99.999%	5g, 25g
Gadolinium(III) nitrate hexahydrate	99.99%	25g, 100g
Gadolinium(III) oxide	99.9%	25g, 100g
Gadolinium(III) sulfate octahydrate	99.9%	25g, 100g
Holmium(III) oxide	99.9%	5g, 25g
Lanthanum(III) chloride heptahydrate	99.9%	25g, 500g
Lanthanum(III) nitrate hexahydrate	99.9%	25g, 500g
Lanthanum(III) oxide	99.99%	25g, 500g
Lutetium(III) oxide	99.9%	5g, 25g
Neodymium(III) chloride hexahydrate	99.9%	25g, 100g
Neodymium(III) nitrate hexahydrate	99.9%	25g, 100g
Neodymium(III) oxide	99.9%	25g, 100g
Niobium(V) oxide	99.9%	25g, 500g
Osmium(VIII) oxide	99.9%	1g, 5g
Praseodymium(III,IV) oxide	99.9%	25g
Ruthenium(IV) oxide anhydrous	99.9%	5g, 25g
Samarium(III) nitrate hexahydrate	99.9%	25g, 100g
Samarium(III) oxide	99.9%	25g, 100g
Scandium(III) oxide	99.9%	5g, 25g
Tantalum(V) oxide	99.9%	25g, 500g
Terbium(III) chloride hexahydrate	99.99%	5g, 25g
Terbium(III) nitrate hexahydrate	99.9%	5g, 25g
Terbium(III,IV) oxide	99.99%	5g, 25g
Thulium(III) oxide	99.99%	5g, 25g
Ytterbium(III) oxide	99.99%	25g
Yttrium(III) chloride hexahydrate	99.9%	25g, 100g
Yttrium(III) nitrate hexahydrate	99.99%	25g, 500g
Yttrium(III) oxide	99.999%	25g, 500g

■ HPLC & PRA Solvent (잔류농약분석 용매)

당사는 고순도 용매 제조장치 및 청정 포장시설에서 제조한 Chromatography (HPLC), Spectrophotometry (UV), LCMS, 잔류농약분석(PRA), Dried 용매, 유기합성, 전자약품 등에 사용하는 고순도 용매들을 생산하고 있습니다.



Product Name	HPLC	PRA	Unit
Acetone	○	○	4L
Acetonitrile	○	○	4L
n-Butanol(1-Butanol)	○		4L
tert-Butyl methyl ether	○		4L
Chloroform	○	○	4L
Cyclohexane	○		4L
1,2-Dichloroethane	○		4L
Dichloromethane	○	○	4L
N,N-Dimethylacetamide	○		4L
N,N-Dimethylformamide(DMF)	○		4L
Dimethyl sulfoxide(DMSO)	○		4L
1,4-Dioxane	○		4L
Ethyl acetate	○	○	4L
Ethyl alcohol 99.9 %	○		4L
Ethyl ether	○		4L
n-Heptane	○	○	4L
n-Hexane 95.0 %	○	○	4L
Isopropyl alcohol(IPA)	○	○	4L
Methyl alcohol	○	○	4L
Methyl ethyl ketone	○		4L
Tetrahydrofuran	○		4L
Tetrahydrofuran (Stabilized)	○		4L
Toluene	○	○	4L
Water	○		4L
Ultra pure-Water	○		4L

■ Anhydrous Solvent

(수분 200ppm 이하)

Product Name	Assay	Grade	Unit
Acetonitrile anhydrous	above 99.9 %	GR	1L
N.N-Dimethylformamide anhydrous	above 99.9 %	GR	1L
Dichloromethane anhydrous	above 99.9 %	GR	1L
Dimethyl sulfoxide anhydrous	above 99.8 %	GR	1L
n-Hexane anhydrous	above 99.9 %	GR	1L
Methyl alcohol anhydrous	above 99.9 %	GR	1L
Tetrahydrofuran anhydrous	above 99.8 %	GR	1L
Toluene anhydrous	above 99.8 %	GR	1L

■ *Chromatography Buffers (HPLC)*

고속액체 크로마토그래피 용매의 재현성과 감도를 높이기 위해 시료용액의 안정성, 이동상 안정성, 검출기의 안정성 및 감도를 고려하여 불순물에 의한 굴절을 변화, 자외선흡수, 형광물질 등 관리항목을 엄격한 품질관리에 의해 생산된 제품으로 용리액(Eluent) 제조용, 시료 전처리용, pH 조정용 등으로 사용되는 고순도 HPLC 전용 시약입니다. *** Unit (100ml)**

Product Name	Use
Trifluoroacetic acid	HPLC 분석용 용리액의 제조용, 유도체의 제조용
Phosphoric acid	HPLC 분석용 용리액의 제조용, pH의 조정용
Formic acid	HPLC 분석용 용리액의 제조용, 시료의 전처리제용
Acetic acid	HPLC 분석용 용리액의 제조용
1N-Tetrabutylammonium hydroxide solution in Methanol	HPLC 분석용 용리액의 제조용
0.5N-Tetrabutylammonium hydroxide solution in Water	HPLC 분석용 용리액의 제조용

■ *LC/MS Chromatography Solvent*

용매에 고순도 산을 첨가하여 만든 제품으로 UV 흡광도 및 저장성과 안정성 등이 유지되는 LC/MS 분석용(용리액) Solvent 입니다.

Product Name	Unit	Product Name	Unit
Acetonitrile-0.1% Trifluoroacetic acid	4L	Acetonitrile-0.1% Formic acid	4L
Water-0.05% Trifluoroacetic acid	4L		
Water-0.1% Trifluoroacetic acid	4L	Acetonitrile-0.1% Acetic acid	4L

■ *Solvent for Electronic Material Solvent*

Product Name	Unit	Grade	Test Item	Specification	Test Method
Acetone	4L 18L 200L	EL	Cs, Be, Sr	below 10 ppb	ICP-MS
Acetonitrile					
Ethyl acetate					
Ethyl alcohol					
N,N-Dimethylformamide					
N-Heptane					
N-Hexane					
Isopropyl ether					
Isopropyl alcohol					
Methanol					
4-Methyl-2-pentanol(MIBC)					
N-Methyl-2-pyrrolidone					
Propylene glycol monomethyl ether					
Tetrahydrofuran					
Toluene			Zn, Na, Ca	below 50 ppb	

■ Karl Fischer Reagent (수분측정용)

특허등록번호 | 10-0648855 10-0648856 | 전량 수입에 의존하고 있던 수분측정용시약을 국내 최초로 자체 개발에 성공하여 특허취득과 함께 절찬리에 공급하고 있습니다.

Volumetric-Karl Fischer Reagent (용량측정용 시약)

Product name	Form	Factor (H ₂ O · mg/mL)	Dehydrate Solution	Use	Application	Unit
VM-I	with Pyridine	5	VM-II	일반용	무기약품, 유기약품, 식품, 세제, 의약, 농약 등	1L
NM-I	Pyridine Free	5	NM-II			1L
VK-I	with Pyridine	5	VK-II	케톤용	케톤류, 아민류, 알데이드(아세트알데히드 제외)	1L
VO-I	with Pyridine	5	VO-II	오일용	식물성오일, 유자류(마가린, 버터등), 접착제, 중유, 석유제품 등	1L
NO-I	Pyridine Free	5	NO-II			1L
VM-I	with Pyridine	5	VS-II	당용	당류, 단백질 등	1L

Coulometric-Karl Fischer Reagent (전위차측정용 시약)

Product name	Form	Type	Use	Application	Unit
ACM	without diaphragm	이액형	일반용	극미량 이온(1000PPM~1PPM)이하	500ml
AM-I	with diaphragm	이액형	일반용	극미량 이온(1000PPM~1PPM)이하	5ml
CM-II	with diaphragm	이액형	일반용	극미량 이온(1000PPM~1PPM)이하	5ml×5
					5ml×10

Dehydrated Solution (탈수용제)

Product name	Use	Reference	Unit
VM-II	일반용	VM-I과 함께 사용	1L
VK-II	케톤용	VK-I과 함께 사용	1L
VO-II	오일용	VO-I과 함께 사용	1L
VS-II	당류용	VM-I 또는 NM-I과 함께 사용	1L
NM-II	일반용	NM-I과 함께 사용	1L
NO-II	오일용	NO-I과 함께 사용	1L
CP-II	유기산, 아미노벤젠 등	VM-I 또는 NM-I과 함께 사용	1L
PE-II	카르보닐화합물 등		1L
PP-II	알데히드류 등		1L
SM-II	아민류 등		1L

Standard Water (표준수)

Product name	Use	Unit
Standard Water, 1000ppm	역가 측정용	5ml×5
Standard Water, 5000ppm	역가 측정용	5ml×10

Karl Fischer Reagent의 역가 선택 방법

대정 K.F.R.의 Factor	시료 수분 (%)	시료채취량
7~5 (H ₂ O · mg/mL)	30~10	0.3~0.5
3 (H ₂ O · mg/mL)	10~0.1	0.5~5

■ Atomic Absorption S/T Solution (원자흡광용)

Product name	Unit	Product name	Unit
Aluminium standard solution 1,000ppm	100ml	Magnesium standard solution 1,000ppm	100ml
Antimony standard solution 1,000ppm	100ml	Manganese standard solution 1,000ppm	100ml
Arsenic standard solution 1,000ppm	100ml	Mercury standard solution 1,000ppm	100ml
Barium standard solution 1,000ppm	100ml	Molybdenum standard solution 1,000ppm	100ml
Bismuth standard solution 1,000ppm	100ml	Nickel standard solution 1,000ppm	100ml
Boron standard solution 1,000ppm	100ml	Platinum standard solution 1,000ppm	100ml
Cadmium standard solution 1,000ppm	100ml	Potassium standard solution 1,000ppm	100ml
Calcium standard solution 1,000ppm	100ml	Silver standard solution 1,000ppm	100ml
Cerium standard solution 1,000ppm	100ml	Sodium standard solution 1,000ppm	100ml
Chromium standard solution 1,000ppm	100ml	Strontium standard solution 1,000ppm	100ml
Cobalt standard solution 1,000ppm	100ml	Tin standard solution 1,000ppm	100ml
Copper standard solution 1,000ppm	100ml	Tungsten standard solution 1,000ppm	100ml
Iron standard solution 1,000ppm	100ml	Vanadium standard solution 1,000ppm	100ml
Lanthanum standard solution 1,000ppm	100ml	Yttrium standard solution 1,000ppm	100ml
Lead standard solution 1,000ppm	100ml	Zinc standard solution 1,000ppm	100ml
Lithium standard solution 1,000ppm	100ml	Zirconium standard solution 1,000ppm	100ml

■ Chemical Analysis & Ion Chromatography S/T Solution

화학, 환경 분석실 등에서 비색 및 비탁, 이온분석용의 표준품으로 사용하는 Ion Standard Solution을 공급하고 있습니다.

Product name	Unit
Ammonium nitrogen standard solution(NH ₄ -N) 100ppm	100ml
Nitrate nitrogen standard solution (NO ₃ -N) 100ppm	100ml
Nitrite nitrogen standard solution (NO ₂ -N) 100ppm	100ml
Ammonium standard solution (NH ₄) 1000ppm	100ml
Bromine standard solution (Br) 1000ppm	100ml
Chloride standard solution (Cl) 1000ppm	100ml
Fluoride standard solution (F) 1000ppm	100ml
Nitrate standard solution (NO ₃) 1000ppm	100ml
Nitrite standard solution (NO ₂) 1000ppm	100ml
Nitrogen standard solution (N) 1000ppm	100ml
Phosphorus standard solution (P) 1000ppm	100ml
Phosphate standard solution (PO ₄) 1000ppm	100ml
Sulfate standard solution (SO ₄) 1000ppm	100ml