

1.3

1 Inorganic Standards

1.3 Acids & Reagents For ICP & AA

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Acids for ICP Trace Analysis

Acetic acid $\geq 99\%$ (Pico-Pure Plus)

NEW CL00.2753

For laboratory use, ICP-MS trace analysis

 $\geq 99\%$ CH₃COOH

Mol.Weight 60.05 g/mol	UN 2789	Caesium (Cs)	<10ppt	Ruthenium (Ru)	<50ppt
Density 1.05 g/ml	ADR 8 (3),II	Chromium (Cr)	<10ppt	Samarium (Sm)	<1ppt
CasNr 64-19-7	IATA 8 (3),II	Cobalt (Co)	<10ppt	Scandium (Sc)	<10ppt
EINECS 200-580-7	IMDG 8 (3),II	Copper (Cu)	<10ppt	Selenium (Se)	Information only
HS Nr 29152100		Dysprosium (Dy)	<1ppt	Silver (Ag)	<50ppt
HNrs H226-H314		Erbium (Er)	<1ppt	Sodium (Na)	<100ppt
PNrs P280-P301 + P330 + P331-P307 + P310-P305 + P351 + P338		Europium (Eu)	<1ppt	Strontium (Sr)	<10ppt
		EDTA	<1ppt	Tellurium (Te)	<1ppt
		Gallium (Ga)	<10ppt	Terbium (Tb)	<1ppt
		Germanium (Ge)	<10ppt	Thallium (Tl)	<10ppt
		Hafnium (Hf)	<10ppt	Thorium (Th)	<1ppt
		Holmium (Ho)	<1ppt	Thulium (Tm)	<1ppt
		Indium (In)	<1ppt	Tin (Sn)	<50ppt
		Iron (Fe)	<50ppt	Titanium (Ti)	<10ppt
		Lanthanum (La)	<1ppt	Tungsten (W)	<10ppt
		Lead (Pb)	<10ppt	Uranium (U)	<1ppt
		Lithium (Li)	<10ppt	Vanadium (V)	<10ppt
		Lutetium (Lu)	<10ppt	Ytterbium (Yb)	<1ppt
		Magnesium (Mg)	<50ppt	Yttrium (Y)	<1ppt
		Manganese (Mn)	<10ppt	Zinc (Zn)	<50ppt
		Molybdenum (Mo)	<10ppt	Zirconium (Zr)	<10ppt
		Neodymium (Nd)	<1ppt		
		Nickel (Ni)	<50ppt		
		Platinum (Pt)	<50ppt		
		Potassium (K)	<50ppt		
		Praseodymium (Pr)	<1ppt		
		Rhenium (Re)	<10ppt		
		Rhodium (Rh)	<50ppt		
		Rubidium (Rb)	<10ppt		
				Art. Nr.	Pack
				CL00.2753.0250	250 ml
					Pack Type
					FEP

DANGER.

Acetic acid $\geq 99\%$ (Pico-Pure)

NEW CL00.2755

For laboratory use, ICP-MS trace analysis

 $\geq 99\%$ CH₃COOH

Mol.Weight 60.05 g/mol	UN 2789	Cobalt (Co)	<0.1ppb	Selenium (Se)	<1ppb
Density 1.05 g/ml	ADR 8 (3),II	Copper (Cu)	<0.5ppb	Silver (Ag)	<1ppb
CasNr 64-19-7	IATA 8 (3),II	Dysprosium (Dy)	<0.1ppb	Sodium (Na)	<1ppb
EINECS 200-580-7	IMDG 8 (3),II	Erbium (Er)	<0.1ppb	Strontium (Sr)	<0.5ppb
HS Nr 29152100		Europium (Eu)	<0.1ppb	Tellurium (Te)	<0.5ppb
HNrs H226-H314		Gadolinium (Gd)	<0.1ppb	Terbium (Tb)	<0.1ppb
PNrs P280-P301 + P330 + P331-P307 + P310-P305 + P351 + P338		Gallium (Ga)	<0.1ppb	Thallium (Tl)	<0.1ppb
		Germanium (Ge)	<0.5ppb	Thorium (Th)	<0.1ppb
		Hafnium (Hf)	<0.1ppb	Thulium (Tm)	<0.1ppb
		Holmium (Ho)	<0.1ppb	Tin (Sn)	<0.5ppb
		Indium (In)	<0.1ppb	Titanium (Ti)	<0.5ppb
		Iron (Fe)	<1ppb	Tungsten (W)	<0.5ppb
		Lanthanum (La)	<0.1ppb	Uranium (U)	<0.1ppb
		Lead (Pb)	<0.1ppb	Vanadium (V)	<0.5ppb
		Lithium (Li)	<0.1ppb	Ytterbium (Yb)	<0.1ppb
		Lutetium (Lu)	<0.1ppb	Yttrium (Y)	<0.1ppb
		Magnesium (Mg)	<0.5ppb	Zinc (Zn)	<1ppb
		Manganese (Mn)	<0.5ppb	Zirconium (Zr)	<0.1ppb
		Mercury (Hg)	<1ppb	Sulfate	<0.5ppm
		Molybdenum (Mo)	<0.5ppb	Reducing Substances	: To pass test
		Neodymium (Nd)	<0.1ppb	Chloride	<1ppm
		Nickel (Ni)	<0.5ppb	Colour	<10APHA
		Platinum (Pt)	<0.5ppb	Phosphate	<1ppm
		Potassium (K)	<1ppb		
		Praseodymium (Pr)	<0.1ppb		
		Rhenium (Re)	<0.1ppb		
		Rhodium (Rh)	<0.5ppb		
		Rubidium (Rb)	<0.1ppb		
		Ruthenium (Ru)	<0.5ppb		
		Samarium (Sm)	<0.1ppb		
		Scandium (Sc)	<0.1ppb		
				Art. Nr.	Pack
				CL00.2755.0500	500 ml
					Pack Type
					FEP

DANGER.



A Certificate of Analysis is provided with each ICP standard stating:

- Actual certified concentration of the final solution
- Traceability to NIST
- Expiration date
- Trace impurities detected

Acids for ICP Trace Analysis

Acetic acid 99-100% (ultra pure)

CL00.0164

For laboratory use, ACS, ISO, Ph. Eur. 99.8+% CH₃COOH

Mol.Weight 60.05 g/mol	UN 2789	Silver (Ag)	<0.001ppm	Nickel (Ni)	<0.005ppm
Density 1.05 g/ml	ADR 8 (3),II	Aluminium (Al)	<0.002ppm	Lead (Pb)	<0.002ppm
CasNr 64-19-7	IATA 8 (3),II	Arsenic (As)	<0.005ppm	Platinum (Pt)	<0.002ppm
EINECS 200-580-7	IMDG 8 (3),II	Gold (Au)	<0.001ppm	Tin (Sn)	<0.001ppm
HS Nr 29152100		Boron (B)	<0.001ppm	Strontium (Sr)	<0.001ppm
HNrs H226-H314		Barium (Ba)	<0.001ppm	Titanium (Ti)	<0.001ppm
PNrs P280-P301 + P330 + P331-P307 + P310-P305 + P351 + P338		Beryllium (Be)	<0.001ppm	Thallium (Tl)	<0.001ppm
		Bismuth (Bi)	<0.002ppm	Vanadium (V)	<0.001ppm
		Calcium (Ca)	<0.01ppm	Zinc (Zn)	<0.002ppm
		Cadmium (Cd)	<0.001ppm	Zirconium (Zr)	<0.001ppm
		Cobalt (Co)	<0.001ppm	Insoluble Matter (Non Solubles)	<2ppm
		Chromium (Cr)	<0.005ppm	Acetaldehyde	<2ppm
		Copper (Cu)	<0.001ppm	Reducing Substances	<50ppm
		Iron (Fe)	<0.02ppm		
		Gallium (Ga)	<0.005ppm		
		Germanium (Ge)	<0.002ppm		
		Mercury (Hg)	<0.005ppm		
		Indium (In)	<0.002ppm		
		Potassium (K)	<0.005ppm		
		Lithium (Li)	<0.001ppm		
		Magnesium (Mg)	<0.005ppm		
		Manganese (Mn)	<0.001ppm		
		Molybdenum (Mo)	<0.001ppm		
		Sodium (Na)	<0.005ppm		

Art. Nr.	Pack	Pack Type
CL00.0164.0250	250 ml	GVB
CL00.0164.1000	1 l	GVB/H
CL00.0164.2500	2,5 l	GVB/H

Ammonia 20-22% solution (Pico-Pure Plus)

NEW CL00.2754

For laboratory use, ICP-MS trace analysis 20-22% NH₃ / kg

Mol.Weight 17.03 g/mol	UN 2672	Chromium (Cr)	<10ppt	Rhodium (Rh)	<10ppt
Density 0.92 g/ml	ADR 8,III	Cobalt (Co)	<10ppt	Rubidium (Rb)	<10ppt
CasNr 1336-21-6	IATA 8,III	Copper (Cu)	<10ppt	Ruthenium (Ru)	: Information only
EINECS 215-647-6	IMDG 8,III	Dysprosium (Dy)	<10ppt	Samarium (Sm)	<10ppt
HS Nr 28142000		Erbium (Er)	<10ppt	Scandium (Sc)	<10ppt
HNrs H314-H335-H400		Europium (Eu)	<10ppt	Selenium (Se)	: Information only
PNrs P280-P273-P301 + P330 + P331-P305 + P351 + P338-P309 + P310		Gadolinium (Gd)	<10ppt	Silver (Ag)	<10ppt
		Gallium (Ga)	<10ppt	Sodium (Na)	<20ppt
		Germanium (Ge)	<10ppt	Strontium (Sr)	<10ppt
		Gold (Au)	<10ppt	Tellurium (Te)	<10ppt
		Hafnium (Hf)	: Information only	Terbium (Tb)	<10ppt
		Holmium (Ho)	<10ppt	Thallium (Tl)	<10ppt
		Indium (In)	<10ppt	Thorium (Th)	<10ppt
		Iron (Fe)	<10ppt	Thulium (Tm)	<10ppt
		Lanthanum (La)	<10ppt	Tin (Sn)	<10ppt
		Lead (Pb)	<10ppt	Titanium (Ti)	<10ppt
		Lithium (Li)	<10ppt	Tungsten (W)	<10ppt
		Lutetium (Lu)	<10ppt	Uranium (U)	<10ppt
		Magnesium (Mg)	<10ppt	Vanadium (V)	<10ppt
		Manganese (Mn)	<10ppt	Ytterbium (Yb)	<10ppt
		Mercury (Hg)	<200ppt	Yttrium (Y)	<10ppt
		Molybdenum (Mo)	<10ppt	Zinc (Zn)	<10ppt
		Neodymium (Nd)	<10ppt	Zirconium (Zr)	<10ppt
		Nickel (Ni)	<10ppt		
		Niobium (Nb)	<10ppt		
		Palladium (Pd)	: Information only		
		Platinum (Pt)	: Information only		
		Potassium (K)	<10ppt		
		Praseodymium (Pr)	<10ppt		
		Rhenium (Re)	: Information only		

Art. Nr.	Pack	Pack Type
CL00.2754.0250	250 ml	HDPE




Acids for ICP Trace Analysis

Ammonia 20-22% solution (Pico-Pure)

NEW CL00.2756

For laboratory use, ICP-MS trace analysis 20-22% NH₃ / kg


Mol.Weight 17.03 g/mol	UN 2672	Copper (Cu)	<0.5ppb	Scandium (Sc)	<0.1ppb
Density 0.92 g/ml	ADR 8,III	Dysprosium (Dy)	<0.1ppb	Selenium (Se)	<1ppb
CasNr 1336-21-6	IATA 8,III	Erbium (Er)	<0.1ppb	Silver (Ag)	<0.5ppb
EINECS 215-647-6	IMDG 8,III	Europium (Eu)	<0.1ppb	Sodium (Na)	<1ppb
HS Nr 28142000		Gadolinium (Gd)	<0.1ppb	Strontium (Sr)	<0.1ppb
HNrs H314-H335-H400		Gallium (Ga)	<0.1ppb	Tellurium (Te)	<0.1ppb
PNrs P280-P273-P301 + P330 + P331-P305 + P351 + P338-P309 + P310		Germanium (Ge)	<0.1ppb	Terbium (Tb)	<0.1ppb
DANGER. 		Gold (Au)	<0.5ppb	Thallium (Tl)	<0.1ppb
		Hafnium (Hf)	: Information only	Thorium (Th)	<0.1ppb
		Holmium (Ho)	<0.1ppb	Thulium (Tm)	<0.1ppb
		Indium (In)	<0.1ppb	Tin (Sn)	<0.5ppb
		Iron (Fe)	<1ppb	Titanium (Ti)	<0.5ppb
		Lanthanum (La)	<0.1ppb	Tungsten (W)	<0.1ppb
		Lead (Pb)	<0.1ppb	Uranium (U)	<0.1ppb
		Lithium (Li)	<0.1ppb	Vanadium (V)	<0.5ppb
		Lutetium (Lu)	<0.1ppb	Ytterbium (Yb)	<0.1ppb
		Magnesium (Mg)	<1ppb	Yttrium (Y)	<0.1ppb
		Manganese (Mn)	<0.5ppb	Zinc (Zn)	<0.5ppb
		Mercury (Hg)	<0.2ppb	Zirconium (Zr)	<0.1ppb
		Molybdenum (Mo)	<0.5ppb	Colour	<10APHA
Assay : 20-22%		Neodymium (Nd)	<0.1ppb	Chloride	<0.5ppm
Aluminium (Al)	<1ppb	Nickel (Ni)	<0.5ppb	Phosphate	<0.01ppm
Antimony (Sb)	<0.5ppb	Niobium (Nb)	<0.1ppb	Sulfate	<1ppm
Arsenic (As)	<1ppb	Palladium (Pd)	: Information only		
Barium (Ba)	<0.1ppb	Platinum (Pt)	: Information only		
Beryllium (Be)	<0.1ppb	Potassium (K)	<1ppb		
Bismuth (Bi)	<0.1ppb	Praseodymium (Pr)	<0.1ppb		
Cadmium (Cd)	<0.5ppb	Rhenium (Re)	: Information only		
Calcium (Ca)	<1ppb	Rhodium (Rh)	<0.5ppb		
Cerium (Ce)	<0.1ppb	Rubidium (Rb)	<0.1ppb		
Caesium (Cs)	<0.1ppb	Ruthenium (Ru)	: Information only		
Chromium (Cr)	<0.5ppb	Samarium (Sm)	<0.1ppb		
Cobalt (Co)	<0.5ppb				

Art. Nr.	Pack	Pack Type
CL00.2756.0500	500 ml	HDPE

Boric acid (ultra pure)

CL00.0230

For laboratory use, AAS and ICP 99.8+% H₃BO₃

Mol.Weight 61.83 g/mol	Assay	>99.8%	Potassium (K)	<0.1ppm
Density 1.44 g/cm ³	Chloride	<3ppm	Lithium (Li)	<0.01ppm
CasNr 10043-35-3	Phosphate	<0.5ppm	Magnesium (Mg)	<0.1ppm
EINECS 233-139-2	Silicate	<0.5ppm	Manganese (Mn)	<0.01ppm
HS Nr 28100090	Sulfate	<5ppm	Molybdenum (Mo)	<0.01ppm
HNrs H360	Silver (Ag)	<0.01ppm	Sodium (Na)	<0.05ppm
PNrs P201-P308 + P313	Aluminium (Al)	<0.05ppm	Nickel (Ni)	<0.01ppm
DANGER. 	Arsenic (As)	<0.05ppm	Lead (Pb)	<0.02ppm
	Gold (Au)	<0.02ppm	Strontium (Sr)	<0.01ppm
	Barium (Ba)	<0.05ppm	Thallium (Tl)	<0.02ppm
	Beryllium (Be)	<0.01ppm	Vanadium (V)	<0.01ppm
	Calcium (Ca)	<0.05ppm	Zinc (Zn)	<0.01ppm
	Cadmium (Cd)	<0.01ppm		
	Cobalt (Co)	<0.01ppm		
	Copper (Cu)	<0.01ppm		
	Iron (Fe)	<0.05ppm		
	Gallium (Ga)	<0.05ppm		
	Indium (In)	<0.02ppm		

Art. Nr.	Pack	Pack Type
CL00.0230.0050	50 g	PE
CL00.0230.0500	500 g	PE

Boric acid 4% solution (ultra pure)

CL02.0220

HF neutralisation solution for ICP 40 g H₃BO₃ / l H₂O

Mol.Weight 61.83 g/mol	Chloride	<0.2ppm	Lithium (Li)	<0.5ppb
Density 1.00 g/ml	Phosphate	<25ppb	Magnesium (Mg)	<4ppb
CasNr 10043-35-3	Silicate	<25ppb	Manganese (Mn)	<0.5ppb
EINECS 233-139-2	Sulfate	<200ppb	Molybdenum (Mo)	<0.5ppb
HS Nr 28100090	Silver (Ag)	<0.5ppb	Sodium (Na)	<2ppb
	Aluminium (Al)	<2ppb	Nickel (Ni)	<0.5ppb
	Arsenic (As)	<2ppb	Lead (Pb)	<1ppb
	Gold (Au)	<1ppb	Strontium (Sr)	<0.5ppb
	Barium (Ba)	<2ppb	Thallium (Tl)	<1ppb
	Beryllium (Be)	<0.5ppb	Vanadium (V)	<0.5ppb
	Calcium (Ca)	<2ppb	Zinc (Zn)	<0.5ppb
	Cadmium (Cd)	<0.5ppb		
	Cobalt (Co)	<0.5ppb		
	Copper (Cu)	<0.5ppb		
	Iron (Fe)	<2ppb		
	Gallium (Ga)	<2ppb		
	Indium (In)	<1ppb		
	Potassium (K)	<4ppb		

Art. Nr.	Pack	Pack Type
CL02.0220.1000	1 l	PE/H
CL02.0220.5000	5 l	PE

Acids for ICP Trace Analysis

Formic acid 98-100% (ultra pure)

CL00.1360

For laboratory use, ACS, Ph. Eur. 98+% HCOOH

Mol.Weight 46.03 g/mol	UN 1779
Density 1.22 g/ml	ADR 8 (3),II
CasNr 64-18-6	IATA 8 (3),II
EINECS 200-579-1	IMDG 8 (3),II
HS Nr 29151100	
HNrs H226-H302-H314-H331	
PNrs P210-P234-P260-P280-P301 + P330 + P331-P303 + P361 + P353-P305 + P351 + P338-P309 + P310	

DANGER.



Assay	>98%	Manganese (Mn)	<0.001ppm
Chloride	<5ppm	Molybdenum (Mo)	<0.001ppm
Sulfate	<0.5ppm	Sodium (Na)	<0.02ppm
Acetic Acid	<500ppm	Nickel (Ni)	<0.002ppm
Silver (Ag)	<0.001ppm	Lead (Pb)	<0.002ppm
Aluminium (Al)	<0.005ppm	Tin (Sn)	<0.001ppm
Gold (Au)	<0.005ppm	Strontium (Sr)	<0.001ppm
Barium (Ba)	<0.002ppm	Titanium (Ti)	<0.001ppm
Beryllium (Be)	<0.001ppm	Thallium (Tl)	<0.001ppm
Bismuth (Bi)	<0.002ppm	Vanadium (V)	<0.001ppm
Calcium (Ca)	<0.05ppm	Zinc (Zn)	<0.005ppm
Cadmium (Cd)	<0.001ppm	Zirconium (Zr)	<0.001ppm
Chromium (Cr)	<0.001ppm	Non Volatiles	<2ppm
Cobalt (Co)	<0.001ppm		
Copper (Cu)	<0.002ppm		
Iron (Fe)	<0.01ppm		
Gallium (Ga)	<0.005ppm		
Mercury (Hg)	<0.005ppm		
Indium (In)	<0.002ppm		
Potassium (K)	<0.02ppm		
Lithium (Li)	<0.001ppm		
Magnesium (Mg)	<0.01ppm		
Manganese (Mn)	<0.01ppm		

Art. Nr.	Pack	Pack Type
CL00.1360.0250	250 ml	GVB
CL00.1360.1000	1 l	GVB/OD
CL00.1360.2500	2,5 l	GVB/OD

Hydrobromic acid 44-49% (Pico-Pure Plus)

NEW CL00.0273

For laboratory use, ICP-MS trace analysis 44-49+% HBr

Mol.Weight 80.91 g/mol	UN 1788
Density 1.49 g/ml	ADR 8,II
CasNr 10035-10-6	IATA 8,II
EINECS 233-113-0	IMDG 8,II
HS Nr 28111910	
HNrs H314-H335	
PNrs P261-P280-P305 + P351 + P338-P310	

DANGER.



Cobalt (Co)	<100ppt	Samarium (Sm)	<10ppt
Copper (Cu)	<100ppt	Scandium (Sc)	<100ppt
Dysprosium (Dy)	<10ppt	Silver (Ag)	<100ppt
Erbium (Er)	<10ppt	Sodium (Na)	<100ppt
Europium (Eu)	<10ppt	Strontium (Sr)	<100ppt
Gadolinium (Gd)	<10ppt	Tantalum (Ta)	: Information only
Gallium (Ga)	<100ppt	Tellurium (Te)	<10ppt
Gold (Au)	<100ppt	Terbium (Tb)	<10ppt
Hafnium (Hf)	<10ppt	Thallium (Tl)	<10ppt
Holmium (Ho)	<10ppt	Thorium (Th)	<1ppt
Indium (In)	<10ppt	Thulium (Tm)	<10ppt
Iron (Fe)	<100ppt	Tin (Sn)	<100ppt
Lanthanum (La)	<10ppt	Titanium (Ti)	<100ppt
Lead (Pb)	<1ppt	Tungsten (W)	<100ppt
Lithium (Li)	<100ppt	Uranium (U)	<1ppt
Lutetium (Lu)	<10ppt	Vanadium (V)	<100ppt
Magnesium (Mg)	<100ppt	Ytterbium (Yb)	<10ppt
Manganese (Mn)	<100ppt	Yttrium (Y)	<10ppt
Molybdenum (Mo)	<100ppt	Zinc (Zn)	<100ppt
Neodymium (Nd)	<10ppt	Zirconium (Zr)	<10ppt
Nickel (Ni)	<100ppt		
Niobium (Nb)	<10ppt		
Palladium (Pd)	<100ppt		
Platinum (Pt)	<100ppt		
Potassium (K)	<100ppt		
Praseodymium (Pr)	<10ppt		
Rhenium (Re)	<100ppt		
Rhodium (Rh)	<100ppt		
Rubidium (Rb)	<100ppt		
Ruthenium (Ru)	<100ppt		

Art. Nr.	Pack	Pack Type
CL00.0273.0250	250 ml	FEB

Hydrobromic acid 48% (ultra pure)

CL00.0231

For laboratory use, AAS and ICP 48+% HBr

Mol.Weight 80.91 g/mol	UN 1788
Density 1.49 g/ml	ADR 8,II
CasNr 10035-10-6	IATA 8,II
EINECS 233-113-0	IMDG 8,II
HS Nr 28111910	
HNrs H314-H335	
PNrs P261-P280-P305 + P351 + P338-P310	

DANGER.



Assay	>48%	Potassium (K)	<0.02ppm
Chloride	<200ppm	Lithium (Li)	<0.001ppm
Iodide (I)	<10ppm	Magnesium (Mg)	<0.01ppm
Phosphate	<0.05ppm	Manganese (Mn)	<0.001ppm
Sulfate	<5ppm	Molybdenum (Mo)	<0.001ppm
Residue after Ignition	<2ppm%	Sodium (Na)	<0.05ppm
Silver (Ag)	<0.002ppm	Nickel (Ni)	<0.002ppm
Aluminium (Al)	<0.01ppm	Lead (Pb)	<0.005ppm
Arsenic (As)	<0.005ppm	Tin (Sn)	<0.005ppm
Gold (Au)	<0.005ppm	Strontium (Sr)	<0.001ppm
Barium (Ba)	<0.005ppm	Titanium (Ti)	<0.001ppm
Beryllium (Be)	<0.001ppm	Thallium (Tl)	<0.002ppm
Bismuth (Bi)	<0.005ppm	Vanadium (V)	<0.001ppm
Calcium (Ca)	<0.05ppm	Zinc (Zn)	<0.005ppm
Cadmium (Cd)	<0.002ppm	Zirconium (Zr)	<0.001ppm
Cobalt (Co)	<0.001ppm		
Chromium (Cr)	<0.001ppm		
Copper (Cu)	<0.001ppm		
Iron (Fe)	<0.01ppm		
Gallium (Ga)	<0.005ppm		
Mercury (Hg)	<0.005ppm		
Indium (In)	<0.001ppm		

Art. Nr.	Pack	Pack Type
CL00.0231.0250	250 ml	GVB
CL00.0231.1000	1 l	GVB/H

Acids for ICP Trace Analysis

Hydrochloric acid 32-35% (Pico-Pure Plus)

NEW CL00.2950

For laboratory use, ICP-MS trace analysis

32-35% HCl

Mol.Weight 36.46 g/mol	UN 1789	Chromium (Cr)	<10ppt	Ruthenium (Ru)	<10ppt
Density 1.17 g/ml	ADR 8,II	Cobalt (Co)	<10ppt	Samarium (Sm)	<10ppt
CasNr 7647-01-0	IATA 8,II	Copper (Cu)	<10ppt	Scandium (Sc)	<10ppt
EINECS 231-595-7	IMDG 8,II	Dysprosium (Dy)	<1ppt	Selenium (Se)	: Information only
HS Nr 28061000		Erbium (Er)	<1ppt	Silver (Ag)	<10ppt
HNrs H290-H314-H335		Europium (Eu)	<1ppt	Sodium (Na)	<10ppt
PNrs P280-P301 + P330 + P331-P308 + P310-P305 + P351 + P338		Gadolinium (Gd)	<1ppt	Strontium (Sr)	<10ppt
		Gallium (Ga)	<10ppt	Tantalum (Ta)	: Information only
		Gold (Au)	<50ppt	Tellurium (Te)	<1ppt
		Hafnium (Hf)	<10ppt	Terbium (Tb)	<1ppt
		Holmium (Ho)	<1ppt	Thallium (Tl)	<10ppt
		Indium (In)	<1ppt	Thorium (Th)	<1ppt
		Iron (Fe)	<10ppt	Thulium (Tm)	<1ppt
		Lanthanum (La)	<1ppt	Tin (Sn)	<20ppt
		Lead (Pb)	<10ppt	Titanium (Ti)	<10ppt
		Lithium (Li)	<10ppt	Tungsten (W)	<10ppt
		Lutetium (Lu)	<10ppt	Uranium (U)	<1ppt
		Iridium (Ir)	<10ppt	Vanadium (V)	<10ppt
		Manganese (Mn)	<10ppt	Ytterbium (Yb)	<1ppt
Assay : 32-35%		Mercury (Hg)	<50ppt	Yttrium (Y)	<1ppt
Aluminium (Al)	<20ppt	Molybdenum (Mo)	<10ppt	Zinc (Zn)	<10ppt
Antimony (Sb)	<20ppt	Neodymium (Nd)	<1ppt	Zirconium (Zr)	<10ppt
Arsenic (As)	<50ppt	Nickel (Ni)	<20ppt		
Barium (Ba)	<10ppt	Niobium (Nb)	<1ppt		
Beryllium (Be)	<10ppt	Palladium (Pd)	: Information only		
Bismuth (Bi)	<10ppt	Platinum (Pt)	: Information only		
Boron (B)	<100ppt	Potassium (K)	<10ppt		
Cadmium (Cd)	<10ppt	Praseodymium (Pr)	<1ppt	Art. Nr.	Pack
Calcium (Ca)	<10ppt	Rhenium (Re)	<10ppt	CL00.2950.0250	250 ml
Cerium (Ce)	<10ppt	Rhodium (Rh)	<10ppt	CL00.2950.0500	500 ml
Caesium (Cs)	<10ppt	Rubidium (Rb)	<10ppt		Pack Type
					PFA
					PFA

DANGER.



Hydrochloric acid 34-37% (Pico-Pure)

NEW CL00.2951

For laboratory use, ICP-MS trace analysis

34-37% HCl

Mol.Weight 36.46 g/mol	UN 1789	Dysprosium (Dy)	<0.1ppb	Strontium (Sr)	<0.1ppb
Density 1.17 g/ml	ADR 8,II	Erbium (Er)	<0.1ppb	Tantalum (Ta)	: Information only
CasNr 7647-01-0	IATA 8,II	Europium (Eu)	<0.1ppb	Tellurium (Te)	<0.1ppb
EINECS 231-595-7	IMDG 8,II	Gadolinium (Gd)	<0.1ppb	Terbium (Tb)	<0.1ppb
HS Nr 28061000		Gallium (Ga)	<0.1ppb	Thallium (Tl)	<0.1ppb
HNrs H290-H314-H335		Gold (Au)	<0.5ppb	Thorium (Th)	<0.1ppb
PNrs P280-P301 + P330 + P331-P308 + P310-P305 + P351 + P338		Hafnium (Hf)	<0.1ppb	Thulium (Tm)	<0.1ppb
		Holmium (Ho)	<0.1ppb	Tin (Sn)	<0.5ppb
		Indium (In)	<0.1ppb	Titanium (Ti)	<0.5ppb
		Iron (Fe)	<1ppb	Tungsten (W)	<0.1ppb
		Lanthanum (La)	<0.1ppb	Uranium (U)	<0.1ppb
		Lead (Pb)	<0.1ppb	Vanadium (V)	<0.5ppb
		Lithium (Li)	<0.1ppb	Ytterbium (Yb)	<0.1ppb
		Lutetium (Lu)	<0.1ppb	Yttrium (Y)	<0.1ppb
		Magnesium (Mg)	<0.5ppb	Zinc (Zn)	<0.5ppb
		Manganese (Mn)	<0.1ppb	Zirconium (Zr)	<0.1ppb
		Mercury (Hg)	<0.1ppb	Colour	<10ppm
		Molybdenum (Mo)	<0.1ppb	Bromide	<10ppm
		Neodymium (Nd)	<0.1ppb	Free Chlorine	<0.5ppm
		Nickel (Ni)	<0.5ppb	Phosphorus (P)	<0.01ppm
Assay : 34-37%		Niobium (Nb)	<0.1ppb	Sulfur (S)	<0.3ppm
Aluminium (Al)	<1ppb	Palladium (Pd)	: Information only		
Antimony (Sb)	<0.5ppb	Platinum (Pt)	: Information only		
Arsenic (As)	<0.5ppb	Potassium (K)	<1ppb	Art. Nr.	Pack
Barium (Ba)	<0.1ppb	Praseodymium (Pr)	<0.1ppb	CL00.2951.0500	500 ml
Beryllium (Be)	<0.1ppb	Rhenium (Re)	<0.1ppb	CL00.2951.1000	1 l
Bismuth (Bi)	<0.1ppb	Rhodium (Rh)	<0.1ppb	CL00.2951.2500	2,5 l
Boron (B)	<1ppb	Rubidium (Rb)	<0.1ppb		Pack Type
Cadmium (Cd)	<0.1ppb	Ruthenium (Ru)	<0.1ppb		FEP
Calcium (Ca)	<1ppb	Samarium (Sm)	<0.1ppb		FEP
Cerium (Ce)	<0.1ppb	Scandium (Sc)	<0.1ppb		FEP
Caesium (Cs)	<0.1ppb	Selenium (Se)	<1ppb		
Chromium (Cr)	<0.5ppb	Silver (Ag)	<1ppb		
Cobalt (Co)	<0.1ppb	Sodium (Na)	<1ppb		
Copper (Cu)	<0.5ppb				

DANGER.



D.: 1.41 g/ml
M.W.: 63.01 g/mol

CHEM-LAB

CL00.1964.0500
500 ml

Batch Nr.: 26.4632501
Exp. Date: 01-2023
Storage: RT

Nitric acid 67-69% (Pico-Pure Plus)
Salpeterminzäure 67-69% (Pico-Pure Plus)
Acide nitrique 67-69% (Pico-Pure Plus)
Salpetersäure 67-69% (Pico-Pure Plus)
Acido nitrico 67-69% (Pico-Pure Plus)
Acido nítrico 67-69% (Pico-Pure Plus)
67-69% HNO₃

For laboratory use, ICP-MS trace analysis

For specifications see certificate

CAS Nr. 7697-37-2
Index Nr. 007-004-00-1
EINECS Nr. 231-714-2
UN 2031
FEP 500

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Danger: May intensify fire. Oxidiser. Causes severe skin burns and eye damage. May be corrosive to metals. Do not breathe dust, fume, gas, mist, vapours, spray. Wear protective gloves, protective clothing, eye protection, face protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF exposed or if you feel unwell: immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Gevaar: Kan brand bevorderen, oxidiserend. Veroorzaakt ernstige brandwonden en oogletsel. Kan bijtend zijn voor metalen. Stof, rook, gas, nevel, damp, vapour, mist niet inademen. Beschermende handschoenen, beschermende kleding, oogbescherming, gelaatsbescherming dragen. NA INSLUKKEN: de mond spoelen. GEEN braken opwekken. NA blootstelling of bij onwel voelen: Onmiddellijk een ANTIGIFCENTRUM of een arts raadplegen. BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.

Danger: Peut aggraver un incendie; comburant. Provoque des brûlures de la peau et des lésions oculaires graves. Peut être corrosif pour les métaux. Ne pas respirer les poussières, fumées, gaz, brouillards, vapeurs, aérosols. Porter des gants de protection, des vêtements de protection, un équipement de protection des yeux, du visage. EN CAS D'INGESTION: rincer la bouche. NE PAS faire vomir. EN CAS D'EXPOSITION ou de malaise: Appeler immédiatement un CENTRE ANTIPOISON ou un médecin. EN CAS DE CONTACT AVEC LES YEUX: rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.

Gefahr: Kann Brand verstärken; Oxidationsmittel. Verursacht schwere Verätzungen der Haut und schwere Augenschäden. Kann gegenüber Metallen korrosiv sein. Staub, Rauch, Gas, Nebel, Dampf, Aerosol nicht einatmen. Schutzhandschuhe, Schutzkleidung, Augenschutz, Gesichtsschutz tragen. BEI VERSCHLUCKEN: Mund ausspülen. KEIN Erbrechen herbeiführen. Bei Exposition oder Unwohlsein: Sofort GIFTINFORMATIONSCENTRUM oder Arzt anrufen. BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.

Peligro: Puede agravar un incendio; comburente. Provoca quemaduras graves en la piel y lesiones oculares graves. Puede ser corrosivo para los metales. No respirar el polvo, el humo, el gas, la niebla, los vapores, el aerosol. Llevar guantes, prendas, gases, máscara de protección. EN CASO DE INGESTION: Enjuagarse la boca. NO provocar el vómito. EN CASO DE EXPOSICION o a se encuentra mal: Llamar inmediatamente a un CENTRO DE INFORMACION TOXICOLÓGICA, Enjuagarse la boca. EN CASO DE CONTACTO CON LOS OJOS: aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.

Pericolo: Può aggravare un incendio; comburente. Provoca gravi ustioni cutanee e gravi lesioni oculari. Può essere corrosivo per i metalli. Non respirare la polvere, i fumi, i gas, la nebbia, i vapori, gli aerosol. Indossare guanti, indumento protettivo. Proteggere gli occhi, il viso. IN CASO DI INGESTIONE: sciacquare la bocca. NON provocare il vomito. IN CASO di esposizione o di malaise: Contattare immediatamente un CENTRO ANTIVELENI o un medico. IN CASO DI CONTATTO CON GLI OCCHI: sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.

Acids for ICP Trace Analysis

Hydrochloric acid 37% a.r. (Low Mercury)

CL00.0380

For laboratory use, ISO, Hg max. 0.005 ppm, trace analysis 37+% HCl

Mol.Weight 36.46 g/mol	UN 1789	Aluminium (Al)	<0.05ppm	Nickel (Ni)	<0.01ppm
Density 1.19 g/ml	ADR 8,II	Arsenic (As)	<0.01ppm	Lead (Pb)	<0.02ppm
CasNr 7647-01-0	IATA 8,II	Gold (Au)	<0.02ppm	Platinum (Pt)	<0.02ppm
EINECS 231-595-7	IMDG 8,II	Boron (B)	<0.02ppm	Antimony (Sb)	<0.01ppm
HS Nr 28061000		Barium (Ba)	<0.1ppm	Tin (Sn)	<0.02ppm
HNrs H290-H314-H335		Beryllium (Be)	<0.01ppm	Strontium (Sr)	<0.02ppm
PNrs P280-P301 + P330 + P331-P308 + P310-P305 + P351 + P338		Bismuth (Bi)	<0.02ppm	Titanium (Ti)	<0.01ppm
DANGER. 		Calcium (Ca)	<0.2ppm	Thallium (Tl)	<0.02ppm
Assay >37%		Cadmium (Cd)	<0.01ppm	Vanadium (V)	<0.01ppm
Residue after Ignition <5ppm		Cobalt (Co)	<0.01ppm	Zinc (Zn)	<0.05ppm
Ammonium <2ppm		Chromium (Cr)	<0.01ppm	Zirconium (Zr)	<0.01ppm
Silver (Ag) <0.02ppm		Copper (Cu)	<0.01ppm	Bromide	<50ppm
		Iron (Fe)	<0.2ppm	Chloride	<0.5ppm
		Gallium (Ga)	<0.02ppm	Phosphate	<0.5ppm
		Germanium (Ge)	<0.05ppm	Sulfate	<1ppm
		Mercury (Hg)	<0.005ppm	Sulfite	<1ppm
		Indium (In)	<0.02ppm		
		Potassium (K)	<0.1ppm		
		Lithium (Li)	<0.02ppm		
		Magnesium (Mg)	<0.1ppm		
		Manganese (Mn)	<0.01ppm	Art. Nr.	Pack
		Molybdenum (Mo)	<0.01ppm	CL00.0380.2500	2,5 l
		Sodium (Na)	<0.5ppm		Pack Type
					GVB

Hydrochloric acid 37% a.r.

CL00.0360

For laboratory use, ISO, Ph. Eur., trace analysis 37+% HCl

Mol.Weight 36.46 g/mol	UN 1789	Assay >37%		Titanium (Ti)	<0.00001%
Density 1.19 g/ml	ADR 8,II	Ammonium <0.0001%		Thallium (Tl)	<0.000005%
CasNr 7647-01-0	IATA 8,II	Aluminium (Al) <0.000005%		Vanadium (V)	<0.000001%
EINECS 231-595-7	IMDG 8,II	Arsenic (As) <0.000001%		Zinc (Zn)	<0.000005%
HS Nr 28061000		Barium (Ba) <0.000002%		Zirconium (Zr)	<0.00001%
HNrs H290-H314-H335		Beryllium (Be) <0.000002%		Bromide	<0.005%
PNrs P280-P301 + P330 + P331-P308 + P310-P305 + P351 + P338		Bismuth (Bi) <0.00001%		Chloride	<0.00005%
DANGER. 		Calcium (Ca) <0.00001%		Phosphate	<0.00005%
		Cadmium (Cd) <0.000001%		Sulfate	<0.0001%
		Cobalt (Co) <0.000001%		Sulfite	<0.0001%
		Chromium (Cr) <0.000002%		Residue after Ignition	<0.0005%
		Copper (Cu) <0.000002%		Mercury (Hg)	<0.000001%
		Iron (Fe) <0.00002%		Colour	< 10 APHA
		Germanium (Ge) <0.000005%		Sulfated Ash	<0.0005%
		Potassium (K) <0.00001%		Residual Solvents (Ph Eur./ICH)	: Excluded by manuf. process
		Lithium (Li) <0.000001%			
		Magnesium (Mg) <0.000001%		Art. Nr.	Pack
		Manganese (Mn) <0.00001%		CL00.0360.1000	1 l
		Molybdenum (Mo) <0.000002%		CL00.0360.2500	2,5 l
		Sodium (Na) <0.00005%			Pack Type
		Nickel (Ni) <0.000002%			GVB
		Lead (Pb) <0.000002%			GVB
		Strontium (Sr) <0.000001%			

Hydrochloric acid 36% a.r., VLSI

CL00.0399

For laboratory use, ISO, Ph. Eur., trace analysis 36+% HCl

Mol.Weight 36.46 g/mol	UN 1789	Assay >36%		Nickel (Ni)	<0.000002%
Density 1.19 g/ml	ADR 8,II	Ammonium <0.0001%		Lead (Pb)	<0.000002%
CasNr 7647-01-0	IATA 8,II	Aluminium (Al) <0.000005%		Strontium (Sr)	<0.000001%
EINECS 231-595-7	IMDG 8,II	Arsenic (As) <0.000001%		Titanium (Ti)	<0.00001%
HS Nr 28061000		Barium (Ba) <0.000002%		Thallium (Tl)	<0.000005%
HNrs H290-H314-H335		Beryllium (Be) <0.000002%		Vanadium (V)	<0.000001%
PNrs P280-P301 + P330 + P331-P308 + P310-P305 + P351 + P338		Bismuth (Bi) <0.00001%		Zinc (Zn)	<0.000005%
DANGER. 		Calcium (Ca) <0.00005%		Zirconium (Zr)	<0.00001%
		Cadmium (Cd) <0.000001%		Bromide	<0.005%
		Cobalt (Co) <0.000001%		Chloride	<0.00005%
		Chromium (Cr) <0.000002%		Phosphate	<0.00005%
		Copper (Cu) <0.000002%		Sulfate	<0.0001%
		Iron (Fe) <0.00002%		Sulfite	<0.0001%
		Germanium (Ge) <0.000005%		Residue after Ignition	<0.0005%
		Potassium (K) <0.00001%		Mercury (Hg)	<0.000001%
		Lithium (Li) <0.000001%			
		Magnesium (Mg) <0.000001%		Art. Nr.	Pack
		Manganese (Mn) <0.00001%		CL00.0399.2500	2,5 l
		Molybdenum (Mo) <0.000002%			Pack Type
		Sodium (Na) <0.00005%			GVB



Acids for ICP Trace Analysis

Hydrochloric acid 32% a.r.

CL00.0365

For laboratory use, ISO, Ph. Eur., trace analysis

32+% HCl

Mol.Weight 36.46 g/mol	UN 1789
Density 1.16 g/ml	ADR 8,II
CasNr 7647-01-0	IATA 8,II
EINECS 231-595-7	IMDG 8,II
HS Nr 28061000	
HNrs H290-H314-H335	
PNrs P280-P301 + P330 + P331-P308 + P310-P305 + P351 + P338-P390	

DANGER.



Assay	>32%
Residue after Ignition	<0.0005%
Ammonium	<0.0001%
Aluminium (Al)	<0.000005%
Arsenic (As)	<0.000001%
Barium (Ba)	<0.000002%
Bismuth (Bi)	<0.00001%
Calcium (Ca)	<0.00005%
Cadmium (Cd)	<0.000001%
Cobalt (Co)	<0.000001%
Chromium (Cr)	<0.000002%
Copper (Cu)	<0.000002%
Iron (Fe)	<0.00002%
Germanium (Ge)	<0.000005%
Potassium (K)	<0.00001%
Lithium (Li)	<0.000001%
Magnesium (Mg)	<0.00001%
Manganese (Mn)	<0.000001%
Molybdenum (Mo)	<0.000002%
Sodium (Na)	<0.00005%

Nickel (Ni)	<0.000002%
Lead (Pb)	<0.000002%
Strontium (Sr)	<0.000001%
Titanium (Ti)	<0.00001%
Thallium (Tl)	<0.000005%
Vanadium (V)	<0.000001%
Zinc (Zn)	<0.000005%
Zirconium (Zr)	<0.00001%
Bromide	<0.005%
Free Chlorine	<0.00005%
Phosphate	<0.00005%
Sulfate	<0.0001%
Sulfite	<0.0001%

Art. Nr.	Pack	Pack Type
CL00.0365.1000	1 l	GVB
CL00.0365.2500	2,5 l	GVB

Hydrochloric acid 30% (ultra pure)

CL00.0361

For laboratory use, AAS and ICP

30+% HCl

Mol.Weight 36.46 g/mol	UN 1789
Density 1.15 g/ml	ADR 8,II
CasNr 7647-01-0	IATA 8,II
EINECS 231-595-7	IMDG 8,II
HS Nr 28061000	
HNrs H290-H314-H335	
PNrs P280-P301 + P330 + P331-P308 + P310-P305 + P351 + P338	

DANGER.



Assay	>30%
Bromide	<50ppm
Free Chlorine	<0.5ppm
Phosphate	<0.01ppm
Sulfate	<0.5ppm
Sulfite	<1ppm
Silver (Ag)	<0.001ppm
Aluminium (Al)	<0.01ppm
Arsenic (As)	<0.005ppm
Gold (Au)	<0.005ppm
Barium (Ba)	<0.005ppm
Beryllium (Be)	<0.001ppm
Bismuth (Bi)	<0.005ppm
Calcium (Ca)	<0.03ppm
Cadmium (Cd)	<0.001ppm
Cobalt (Co)	<0.001ppm
Chromium (Cr)	<0.001ppm
Copper (Cu)	<0.001ppm
Iron (Fe)	<0.01ppm
Gallium (Ga)	<0.005ppm
Mercury (Hg)	<0.005ppm
Indium (In)	<0.002ppm
Potassium (K)	<0.01ppm
Lithium (Li)	<0.001ppm

Magnesium (Mg)	<0.005ppm
Manganese (Mn)	<0.001ppm
Molybdenum (Mo)	<0.001ppm
Ammonium	<1ppm
Sodium (Na)	<0.02ppm
Nickel (Ni)	<0.005ppm
Lead (Pb)	<0.001ppm
Platinum (Pt)	<0.01ppm
Tin (Sn)	<0.001ppm
Strontium (Sr)	<0.001ppm
Titanium (Ti)	<0.001ppm
Thallium (Tl)	<0.001ppm
Vanadium (V)	<0.001ppm
Zinc (Zn)	<0.002ppm
Zirconium (Zr)	<0.001ppm

Art. Nr.	Pack	Pack Type
CL00.0361.0250	250 ml	GVB
CL00.0361.1000	1 l	GVB/H
CL00.0361.2500	2,5 l	GVB/H

Hydrochloric acid 20% (ultra pure)

CL00.0311

For laboratory use, AAS and ICP

20+% HCl

Mol.Weight 36.46 g/mol	UN 1789
Density 1.10 g/ml	ADR 8,II
CasNr 7647-01-0	IATA 8,II
EINECS 231-595-7	IMDG 8,II
HS Nr 28061000	
HNrs H290-H314-H335	
PNrs P280-P301 + P330 + P331-P308 + P310-P305 + P351 + P338	

DANGER.



Assay	>20%
Bromide	<50ppm
Chloride	<0.5ppm
Phosphate	<0.01ppm
Sulfate	<0.5ppm
Sulfite	<1ppm
Silver (Ag)	<0.001ppm
Aluminium (Al)	<0.01ppm
Arsenic (As)	<0.005ppm
Gold (Au)	<0.005ppm
Barium (Ba)	<0.005ppm
Beryllium (Be)	<0.001ppm
Bismuth (Bi)	<0.005ppm
Calcium (Ca)	<0.03ppm
Cadmium (Cd)	<0.001ppm
Cobalt (Co)	<0.001ppm
Chromium (Cr)	<0.001ppm
Copper (Cu)	<0.001ppm
Iron (Fe)	<0.01ppm
Gallium (Ga)	<0.005ppm
Mercury (Hg)	<0.005ppm
Indium (In)	<0.002ppm
Potassium (K)	<0.01ppm

Lithium (Li)	<0.001ppm
Magnesium (Mg)	<0.005ppm
Manganese (Mn)	<0.001ppm
Molybdenum (Mo)	<0.001ppm
Ammonium	<1ppm
Sodium (Na)	<0.02ppm
Nickel (Ni)	<0.005ppm
Lead (Pb)	<0.001ppm
Platinum (Pt)	<0.01ppm
Tin (Sn)	<0.001ppm
Strontium (Sr)	<0.001ppm
Titanium (Ti)	<0.001ppm
Thallium (Tl)	<0.001ppm
Vanadium (V)	<0.001ppm
Zinc (Zn)	<0.002ppm
Zirconium (Zr)	<0.001ppm

Art. Nr.	Pack	Pack Type
CL00.0311.1000	1 l	GVB/H
CL00.0311.2500	2,5 l	GVB/H

Acids for ICP Trace Analysis

Hydrofluoric acid 47-51% (Pico-Pure Plus)

NEW CL00.0643

For laboratory use, ICP-MS trace analysis 47-51% HF

Mol.Weight 20.01 g/mol	UN 1790	Caesium (Cs)	<10ppt	Rhodium (Rh)	<20ppt
Density 1.13 g/ml	ADR 8 (6.1),II	Chromium (Cr)	<10ppt	Rubidium (Rb)	<20ppt
CasNr 7664-39-3	IATA 8 (6.1),II	Cobalt (Co)	<10ppt	Ruthenium (Ru)	<20ppt
EINECS 231-634-8	IMDG 8 (6.1),II	Copper (Cu)	<10ppt	Samarium (Sm)	<1ppt
HS Nr 28111100		Dysprosium (Dy)	<1ppt	Scandium (Sc)	<10ppt
HNrs H330-H300-H310-H314		Erbium (Er)	<1ppt	Selenium (Se)	: Information only
PNrs P280-P302 + P352-P301 + P330 + P331-P305 + P351 + P338-P304 + P340-P309 + P310		Europium (Eu)	<1ppt	Silver (Ag)	<10ppt
		Gadolinium (Gd)	<1ppt	Sodium (Na)	<10ppt
		Gallium (Ga)	<10ppt	Strontium (Sr)	<10ppt
		Germanium (Ge)	<10ppt	Tantalum (Ta)	: Information only
		Gold (Au)	<20ppt	Tellurium (Te)	<1ppt
		Hafnium (Hf)	<10ppt	Terbium (Tb)	<1ppt
		Holmium (Ho)	<1ppt	Thallium (Tl)	<10ppt
		Indium (In)	<1ppt	Thorium (Th)	<1ppt
		Iron (Fe)	<10ppt	Thulium (Tm)	<1ppt
		Lanthanum (La)	<10ppt	Tin (Sn)	<20ppt
		Lead (Pb)	<10ppt	Titanium (Ti)	<20ppt
		Lithium (Li)	<10ppt	Tungsten (W)	<20ppt
		Lutetium (Lu)	<1ppt	Uranium (U)	<1ppt
		Magnesium (Mg)	<10ppt	Vanadium (V)	<10ppt
		Manganese (Mn)	<10ppt	Ytterbium (Yb)	<1ppt
		Mercury (Hg)	<50ppt	Yttrium (Y)	<1ppt
		Molybdenum (Mo)	<10ppt	Zinc (Zn)	<10ppt
		Neodymium (Nd)	<1ppt	Zirconium (Zr)	<10ppt
		Nickel (Ni)	<20ppt		
		Niobium (Nb)	<10ppt		
		Palladium (Pd)	<20ppt		
		Platinum (Pt)	<20ppt		
		Potassium (K)	<10ppt		
		Praseodymium (Pr)	<1ppt		
		Rhenium (Re)	<10ppt		

Art. Nr.	Pack	Pack Type
CL00.0643.0250	250 ml	PFA

Hydrofluoric acid 47-51% (Pico-Pure)

NEW CL00.0644

For laboratory use, ICP-MS trace analysis 47-51% HF

Mol.Weight 20.01 g/mol	UN 1790	Cobalt (Co)	<0.1ppb	Scandium (Sc)	<0.1ppb
Density 1.13 g/ml	ADR 8 (6.1),II	Copper (Cu)	<0.5ppb	Selenium (Se)	<1ppb
CasNr 7664-39-3	IATA 8 (6.1),II	Dysprosium (Dy)	<0.1ppb	Silver (Ag)	<0.5ppb
EINECS 231-634-8	IMDG 8 (6.1),II	Erbium (Er)	<0.1ppb	Sodium (Na)	<1ppb
HS Nr 28111100		Europium (Eu)	<0.1ppb	Strontium (Sr)	<0.1ppb
HNrs H330-H300-H310-H314		Gadolinium (Gd)	<0.1ppb	Tantalum (Ta)	: Information only
PNrs P280-P302 + P352-P301 + P330 + P331-P305 + P351 + P338-P304 + P340-P309 + P310		Gallium (Ga)	<0.1ppb	Tellurium (Te)	<0.1ppb
		Germanium (Ge)	<0.1ppb	Terbium (Tb)	<0.1ppb
		Gold (Au)	<0.2ppb	Thallium (Tl)	<0.1ppb
		Hafnium (Hf)	<0.1ppb	Thorium (Th)	<0.1ppb
		Holmium (Ho)	<0.1ppb	Thulium (Tm)	<0.1ppb
		Indium (In)	<0.1ppb	Tin (Sn)	<0.5ppb
		Iron (Fe)	<1ppb	Titanium (Ti)	<1ppb
		Lanthanum (La)	<0.1ppb	Tungsten (W)	<0.5ppb
		Lead (Pb)	<0.1ppb	Uranium (U)	<0.1ppb
		Lithium (Li)	<0.1ppb	Vanadium (V)	<0.1ppb
		Lutetium (Lu)	<0.1ppb	Ytterbium (Yb)	<0.1ppb
		Magnesium (Mg)	<1ppb	Yttrium (Y)	<0.1ppb
		Manganese (Mn)	<0.1ppb	Zinc (Zn)	<1ppb
		Mercury (Hg)	<1ppb	Zirconium (Zr)	<0.1ppb
		Molybdenum (Mo)	<0.1ppb	Colour	<10APHA
		Neodymium (Nd)	<0.1ppb	Chloride	<4ppm
		Nickel (Ni)	<0.5ppb	Silicon (Si)	<20ppb
		Niobium (Nb)	<0.1ppb	Phosphorus (P)	<0.05ppm
		Palladium (Pd)	<0.2ppb	Sulfur (S)	<0.1ppm
		Platinum (Pt)	<0.2ppb		
		Potassium (K)	<1ppb		
		Praseodymium (Pr)	<0.1ppb		
		Rhenium (Re)	<0.1ppb		
		Rhodium (Rh)	<0.1ppb		
		Rubidium (Rb)	<0.1ppb		
		Ruthenium (Ru)	<0.1ppb		
		Samarium (Sm)	<0.1ppb		

Art. Nr.	Pack	Pack Type
CL00.0644.0500	500 ml	PFA

**Don't see the exact solution you need?
E-mail us the Tailor Made Standard Quotation request
form in the back of the catalog.**



Acids for ICP Trace Analysis

Hydrofluoric acid 49+% a.r., VLSI

CL00.0625

For laboratory use, ISO, trace analysis 49+% HF

Mol.Weight 20.01 g/mol	UN 1790	Assay	>49%	Manganese (Mn)	<0.00005%
Density 1.16 g/ml	ADR 8 (6.1),II	Chloride	<0.001%	Molybdenum (Mo)	<0.00005%
CasNr 7664-39-3	IATA 8 (6.1),II	Hexafluorosilicate	<0.005%	Sodium (Na)	<0.00002%
EINECS 231-634-8	IMDG 8 (6.1),II	Phosphate	<0.00005%	Nickel (Ni)	<0.00002%
HS Nr 28111100		Sulfate	<0.0002%	Lead (Pb)	<0.00005%
HNrs H330-H300-H310-H314		Sulfite	<0.0002%	Strontium (Sr)	<0.00002%
PNrs P280-P302 + P352-P301 + P330 + P331-P305 + P351 + P338-P304 + P340-P309 + P310		Silver (Ag)	<0.00002%	Titanium (Ti)	<0.00001%
		Aluminium (Al)	<0.00005%	Thallium (Tl)	<0.00005%
		Barium (Ba)	<0.00001%	Vanadium (V)	<0.00005%
		Beryllium (Be)	<0.00002%	Zinc (Zn)	<0.00005%
		Bismuth (Bi)	<0.00001%	Zirconium (Zr)	<0.00001%
		Calcium (Ca)	<0.00005%	Sulfated Ash	<0.0005%
		Cadmium (Cd)	<0.00001%	Colour	< 10 APHA
		Cobalt (Co)	<0.00002%		
		Chromium (Cr)	<0.00002%		
		Copper (Cu)	<0.00002%		
		Iron (Fe)	<0.00002%		
		Germanium (Ge)	<0.00005%		
		Potassium (K)	<0.00001%		
		Lithium (Li)	<0.00002%		
		Magnesium (Mg)	<0.00002%		

Art. Nr.	Pack	Pack Type
CL00.0625.1000	1 l	PE/H
CL00.0625.2500	2,5 l	PE/H

DANGER.



Hydrofluoric acid 40% (ultra pure)

CL00.0617

For laboratory use, AAS and ICP 40+% HF

Mol.Weight 20.01 g/mol	UN 1790	Assay	>40%	Lithium (Li)	<0.001ppm
Density 1.13 g/ml	ADR 8 (6.1),II	Chloride	<0.5ppm	Magnesium (Mg)	<0.005ppm
CasNr 7664-39-3	IATA 8 (6.1),II	Hexafluorosilicate	<20ppm	Manganese (Mn)	<0.001ppm
EINECS 231-634-8	IMDG 8 (6.1),II	Phosphate	<0.1ppm	Molybdenum (Mo)	<0.001ppm
HS Nr 28111100		Sulfate	<0.5ppm	Sodium (Na)	<0.01ppm
HNrs H330-H300-H310-H314		Sulfite	<2ppm	Nickel (Ni)	<0.001ppm
PNrs P280-P302 + P352-P301 + P330 + P331-P305 + P351 + P338-P304 + P340-P309 + P310		Silver (Ag)	<0.001ppm	Lead (Pb)	<0.002ppm
		Aluminium (Al)	<0.005ppm	Tin (Sn)	<0.001ppm
		Arsenic (As)	<0.02ppm	Strontium (Sr)	<0.001ppm
		Gold (Au)	<0.002ppm	Titanium (Ti)	<0.01ppm
		Barium (Ba)	<0.01ppm	Thallium (Tl)	<0.001ppm
		Beryllium (Be)	<0.001ppm	Vanadium (V)	<0.001ppm
		Bismuth (Bi)	<0.001ppm	Zinc (Zn)	<0.005ppm
		Calcium (Ca)	<0.01ppm	Zirconium (Zr)	<0.001ppm
		Cadmium (Cd)	<0.002ppm	Residue after Ignition	<2ppm
		Cobalt (Co)	<0.002ppm		
		Chromium (Cr)	<0.001ppm		
		Copper (Cu)	<0.001ppm		
		Iron (Fe)	<0.01ppm		
		Gallium (Ga)	<0.005ppm		
		Germanium (Ge)	<0.002ppm		
		Mercury (Hg)	<0.02ppm		
		Indium (In)	<0.002ppm		
		Potassium (K)	<0.01ppm		

Art. Nr.	Pack	Pack Type
CL00.0617.0250	250 ml	PE
CL00.0617.1000	1 l	PE/H
CL00.0617.2500	2,5 l	PE/H

DANGER.



Hydrogen peroxide 30-32 % solution (Pico-Pure Plus)

NEW CL00.2315

For laboratory use, ICP-MS trace analysis 30-32% H2O2

Mol.Weight 34.01 g/mol	UN 2014	Chromium (Cr)	<10ppt	Ruthenium (Ru)	<10ppt
Density 1.11 g/ml	ADR 5.1 (8),II	Cobalt (Co)	<10ppt	Samarium (Sm)	<1ppt
CasNr 7722-84-1	IATA 5.1 (8),II	Copper (Cu)	<10ppt	Scandium (Sc)	<10ppt
EINECS 231-765-0	IMDG 5.1 (8),II	Dysprosium (Dy)	<1ppt	Selenium (Se)	<100ppt
HS Nr 28470000		Erbium (Er)	<1ppt	Silver (Ag)	<10ppt
HNrs H271-H302-H314-H318-H335-H412		Europium (Eu)	<1ppt	Sodium (Na)	<50ppt
PNrs P210-P310-P301 + P330 + P331-P305 + P351 + P338-P303 + P361 + P353-P280		Gadolinium (Gd)	<1ppt	Strontium (Sr)	<10ppt
		Gallium (Ga)	<10ppt	Tantalum (Ta)	<10ppt
		Germanium (Ge)	<10ppt	Tellurium (Te)	<1ppt
		Gold (Au)	<10ppt	Terbium (Tb)	<1ppt
		Hafnium (Hf)	<1ppt	Thallium (Tl)	<1ppt
		Holmium (Ho)	<1ppt	Thorium (Th)	<1ppt
		Indium (In)	<1ppt	Thulium (Tm)	<1ppt
		Iron (Fe)	<20ppt	Tin (Sn)	<50ppt
		Lanthanum (La)	<1ppt	Titanium (Ti)	<20ppt
		Lead (Pb)	<10ppt	Tungsten (W)	<20ppt
		Lithium (Li)	<10ppt	Uranium (U)	<1ppt
		Lutetium (Lu)	<1ppt	Vanadium (V)	<10ppt
		Magnesium (Mg)	<20ppt	Ytterbium (Yb)	<1ppt
		Manganese (Mn)	<10ppt	Yttrium (Y)	<1ppt
		Mercury (Hg)	<50ppt	Zinc (Zn)	<50ppt
		Molybdenum (Mo)	<10ppt	Zirconium (Zr)	<10ppt
		Neodymium (Nd)	<1ppt		
		Nickel (Ni)	<20ppt		
		Niobium (Nb)	<10ppt		
		Palladium (Pd)	<10ppt		
		Potassium (K)	<20ppt		
		Praseodymium (Pr)	<1ppt		
		Rhenium (Re)	<10ppt		
		Rhodium (Rh)	<10ppt		
		Rubidium (Rb)	<10ppt		

Art. Nr.	Pack	Pack Type
CL00.2315.0500	500 ml	FL/FEP

DANGER.




Acids for ICP Trace Analysis

Nitric acid 67-69% (Pico-Pure Plus)

NEW CL00.1964

For laboratory use, ICP-MS trace analysis

67-69% HNO₃


Mol.Weight 63.01 g/mol	UN 2031	Cobalt (Co)	<10ppt	Samarium (Sm)	<1ppt
Density 1.41 g/ml	ADR 8 (5.1),II	Copper (Cu)	<10ppt	Scandium (Sc)	<10ppt
CasNr 7697-37-2	IATA 8 (5.1),II	Dysprosium (Dy)	<1ppt	Selenium (Se)	: Information only
EINECS 231-714-2	IMDG 8 (5.1),II	Erbium (Er)	<1ppt	Silver (Ag)	<10ppt
HS Nr 28080000		Europium (Eu)	<1ppt	Sodium (Na)	<10ppt
HNrs H272-H314-H290		Gadolinium (Gd)	<1ppt	Strontium (Sr)	<10ppt
PNrs P260-P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		Gallium (Ga)	<10ppt	Tantalum (Ta)	: Information only
DANGER.		Germanium (Ge)	<10ppt	Tellurium (Te)	<1ppt
Assay	: 67-69%	Gold (Au)	<20ppt	Terbium (Tb)	<1ppt
Aluminium (Al)	<20ppt	Hafnium (Hf)	<10ppt	Thallium (Tl)	<10ppt
Antimony (Sb)	<10ppt	Holmium (Ho)	<1ppt	Thorium (Th)	<1ppt
Arsenic (As)	<20ppt	Indium (In)	<1ppt	Thulium (Tm)	<1ppt
Barium (Ba)	<10ppt	Iron (Fe)	<10ppt	Tin (Sn)	<20ppt
Beryllium (Be)	<10ppt	Lanthanum (La)	<1ppt	Titanium (Ti)	<10ppt
Bismuth (Bi)	<10ppt	Lead (Pb)	<10ppt	Tungsten (W)	<10ppt
Boron (B)	<10ppt	Lithium (Li)	<10ppt	Uranium (U)	<1ppt
Cadmium (Cd)	<10ppt	Lutetium (Lu)	<1ppt	Vanadium (V)	<10ppt
Calcium (Ca)	<10ppt	Magnesium (Mg)	<10ppt	Ytterbium (Yb)	<1ppt
Cerium (Ce)	<10ppt	Manganese (Mn)	<10ppt	Yttrium (Y)	<1ppt
Caesium (Cs)	<10ppt	Mercury (Hg)	<50ppt	Zinc (Zn)	<10ppt
Chromium (Cr)	<10ppt	Molybdenum (Mo)	<10ppt	Zirconium (Zr)	<10ppt
		Neodymium (Nd)	<1ppt		
		Nickel (Ni)	<20ppt	Art. Nr.	Pack
		Niobium (Nb)	<1ppt	CL00.1964.0250	250 ml
		Palladium (Pd)	<20ppt	CL00.1964.0500	500 ml
		Platinum (Pt)	<20ppt	CL00.1964.1000	1 l
		Potassium (K)	<10ppt		Pack Type
		Praseodymium (Pr)	<1ppt		FEP
		Rhenium (Re)	<10ppt		FEP
		Rhodium (Rh)	<10ppt		FEP
		Rubidium (Rb)	<10ppt		
		Ruthenium (Ru)	<20ppt		

Nitric acid 67-69% (Pico-Pure)

NEW CL00.1965

For laboratory use, ICP-MS trace analysis

67-69% HNO₃

Mol.Weight 63.01 g/mol	UN 2031	Copper (Cu)	<0.5ppb	Selenium (Se)	<1ppb
Density 1.41 g/ml	ADR 8 (5.1),II	Dysprosium (Dy)	<0.1ppb	Silver (Ag)	<0.1ppb
CasNr 7697-37-2	IATA 8 (5.1),II	Erbium (Er)	<0.1ppb	Sodium (Na)	<1ppb
EINECS 231-714-2	IMDG 8 (5.1),II	Europium (Eu)	<0.1ppb	Strontium (Sr)	<0.1ppb
HS Nr 28080000		Gadolinium (Gd)	<0.1ppb	Tantalum (Ta)	: Information only
HNrs H272-H314-H290		Gallium (Ga)	<0.1ppb	Tellurium (Te)	<0.1ppb
PNrs P260-P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		Germanium (Ge)	<0.1ppb	Terbium (Tb)	<0.1ppb
DANGER.		Gold (Au)	<0.1ppb	Thallium (Tl)	<0.1ppb
Assay	: 67-69%	Hafnium (Hf)	<0.1ppb	Thorium (Th)	<0.1ppb
Aluminium (Al)	<1ppb	Holmium (Ho)	<0.1ppb	Thulium (Tm)	<0.1ppb
Antimony (Sb)	<0.5ppb	Indium (In)	<0.1ppb	Tin (Sn)	<0.5ppb
Arsenic (As)	<0.5ppb	Iron (Fe)	<1ppb	Titanium (Ti)	<0.5ppb
Barium (Ba)	<0.1ppb	Lanthanum (La)	<0.1ppb	Tungsten (W)	<0.1ppb
Beryllium (Be)	<0.1ppb	Lead (Pb)	<0.1ppb	Uranium (U)	<0.1ppb
Bismuth (Bi)	<0.1ppb	Lithium (Li)	<0.1ppb	Vanadium (V)	<0.5ppb
Boron (B)	<1ppb	Lutetium (Lu)	<0.1ppb	Ytterbium (Yb)	<0.1ppb
Cadmium (Cd)	<0.5ppb	Magnesium (Mg)	<1ppb	Yttrium (Y)	<0.1ppb
Calcium (Ca)	<1ppb	Manganese (Mn)	<0.1ppb	Zinc (Zn)	<0.5ppb
Cerium (Ce)	<0.1ppb	Mercury (Hg)	<0.1ppb	Zirconium (Zr)	<0.1ppb
Caesium (Cs)	<0.1ppb	Molybdenum (Mo)	<0.1ppb	Chloride	<0.2ppm
Chromium (Cr)	<1ppb	Neodymium (Nd)	<0.1ppb	Phosphorus (P)	<0.01ppm
Cobalt (Co)	<0.5ppb	Nickel (Ni)	<0.5ppb	Sulfur (S)	<0.3ppm
		Niobium (Nb)	<0.1ppb		
		Palladium (Pd)	<0.5ppb	Art. Nr.	Pack
		Platinum (Pt)	<0.5ppb	CL00.1965.0500	500 ml
		Potassium (K)	<1ppb	CL00.1965.1000	1 l
		Praseodymium (Pr)	<0.1ppb	CL00.1965.2500	2,5 l
		Rhenium (Re)	<0.1ppb		Pack Type
		Rhodium (Rh)	<0.5ppb		FEP
		Rubidium (Rb)	<0.1ppb		FEP
		Ruthenium (Ru)	<0.5ppb		FEP
		Samarium (Sm)	<0.1ppb		
		Scandium (Sc)	<0.1ppb		





Acids for ICP Trace Analysis

Nitric acid 70% (ultra pure)

CL00.1934

For laboratory use, AAS and ICP 69+% HNO₃ - (Appearance of a yellowish tinge in the container has no impact on product quality).

Mol.Weight 63.01 g/mol	UN 2031	Silver (Ag)	<0.001ppm	Lead (Pb)	<0.0005ppm	
Density 1.41 g/ml	ADR 8 (5.1),II	Aluminium (Al)	<0.030ppm	Tin (Sn)	<0.005ppm	
CasNr 7697-37-2	IATA 8 (5.1),II	Arsenic (As)	<0.005ppm	Strontium (Sr)	<0.001ppm	
EINECS 231-714-2	IMDG 8 (5.1),II	Gold (Au)	<0.004ppm	Titanium (Ti)	<0.001ppm	
HS Nr 28080000		Barium (Ba)	<0.001ppm	Thallium (Tl)	<0.005ppm	
HNrs H272-H314-H290		Beryllium (Be)	<0.001ppm	Vanadium (V)	<0.001ppm	
PNrs P260-P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		Bismuth (Bi)	<0.001ppm	Zinc (Zn)	<0.005ppm	
		Calcium (Ca)	<0.05ppm	Zirconium (Zr)	<0.001ppm	
		Cadmium (Cd)	<0.001ppm	Boron (B)	<0.004ppm	
		Cobalt (Co)	<0.001ppm	Selenium (Se)	<0.001ppm	
		Chromium (Cr)	<0.010ppm	Antimony (Sb)	<0.005ppm	
		Copper (Cu)	<0.001ppm	Niobium (Nb)	<0.001ppm	
		Iron (Fe)	<0.01ppm	Silicon (Si)	<0.020ppm	
		Gallium (Ga)	<0.020ppm	Tantalum (Ta)	<0.002ppm	
		Germanium (Ge)	<0.004ppm	Non Volatiles	<2ppm	
		Mercury (Hg)	<0.0005ppm			
		Indium (In)	<0.002ppm			
		Potassium (K)	<0.005ppm			
		Lithium (Li)	<0.001ppm			
		Magnesium (Mg)	<0.01ppm			
		Manganese (Mn)	<0.001ppm			
		Molybdenum (Mo)	<0.005ppm			
		Sodium (Na)	<0.200ppm			
		Nickel (Ni)	<0.001ppm			
DANGER.  						
Assay	>69%			Art. Nr.	Pack	Pack Type
Chloride	<0.04ppm			CL00.1934.0500	500 ml	GVB/H
Phosphate	<0.1ppm			CL00.1934.1000	1 l	GVB/H
Sulfate	<0.4ppm					

Nitric acid 65% (ultra pure)

CL00.1905

For laboratory use, AAS and ICP 65+% HNO₃ - (Appearance of a yellowish tinge in the container has no impact on product quality).

Mol.Weight 63.01 g/mol	UN 2031	Assay	>65%	Molybdenum (Mo)	<0.001ppm	
Density 1.39 g/ml	ADR 8 (5.1),II	Chloride	<0.05ppm	Sodium (Na)	<0.01ppm	
CasNr 7697-37-2	IATA 8 (5.1),II	Phosphate	<0.01ppm	Nickel (Ni)	<0.01ppm	
EINECS 231-714-2	IMDG 8 (5.1),II	Sulfate	<0.2ppm	Lead (Pb)	<0.001ppm	
HS Nr 28080000		Silver (Ag)	<0.001ppm	Tin (Sn)	<0.005ppm	
HNrs H272-H314-H290		Aluminium (Al)	<0.005ppm	Strontium (Sr)	<0.001ppm	
PNrs P260-P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		Arsenic (As)	<0.005ppm	Titanium (Ti)	<0.001ppm	
		Gold (Au)	<0.005ppm	Thallium (Tl)	<0.001ppm	
		Barium (Ba)	<0.005ppm	Vanadium (V)	<0.001ppm	
		Beryllium (Be)	<0.001ppm	Zinc (Zn)	<0.005ppm	
		Bismuth (Bi)	<0.005ppm	Zirconium (Zr)	<0.001ppm	
		Calcium (Ca)	<0.03ppm	Boron (B)	<0.01ppm	
		Cadmium (Cd)	<0.001ppm	Selenium (Se)	<0.001ppm	
		Cobalt (Co)	<0.001ppm	Antimony (Sb)	<0.001ppm	
		Chromium (Cr)	<0.002ppm	Uranium (U)	<0.02ppm	
		Copper (Cu)	<0.001ppm			
		Iron (Fe)	<0.01ppm			
		Gallium (Ga)	<0.005ppm			
		Germanium (Ge)	<0.005ppm			
		Mercury (Hg)	<0.002ppm			
		Indium (In)	<0.002ppm			
		Potassium (K)	<0.01ppm			
		Lithium (Li)	<0.001ppm			
		Magnesium (Mg)	<0.01ppm			
		Manganese (Mn)	<0.001ppm			
DANGER.  				Art. Nr.	Pack	Pack Type
				CL00.1905.0250	250 ml	GVB
				CL00.1905.1000	1 l	GVB/H
				CL00.1905.2500	2,5 l	GVB/H

Nitric acid 65% a.r.

CL00.1915

For laboratory use, ACS, ISO, Ph. Eur., trace analysis quality) 65+% HNO₃ - (Appearance of a yellowish tinge in the container has no impact on product quality).

Mol.Weight 63.01 g/mol	UN 2031	Assay	>65%	Nickel (Ni)	<0.000002%	
Density 1.39 g/ml	ADR 8 (5.1),II	Residue after Ignition	<0.00025%	Lead (Pb)	<0.000001%	
CasNr 7697-37-2	IATA 8 (5.1),II	Silver (Ag)	<0.000001%	Strontium (Sr)	<0.000001%	
EINECS 231-714-2	IMDG 8 (5.1),II	Arsenic (As)	<0.000001%	Titanium (Ti)	<0.000001%	
HS Nr 28080000		Aluminium (Al)	<0.000005%	Thallium (Tl)	<0.000005%	
HNrs H272-H314-H290		Barium (Ba)	<0.000001%	Vanadium (V)	<0.000001%	
PNrs P260-P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		Beryllium (Be)	<0.000001%	Zinc (Zn)	<0.000005%	
		Bismuth (Bi)	<0.000001%	Zirconium (Zr)	<0.00001%	
		Calcium (Ca)	<0.000001%	Chloride	<0.00005%	
		Cadmium (Cd)	<0.000001%	Phosphate	<0.0002%	
		Cobalt (Co)	<0.000001%	Sulfate	<0.0002%	
		Chromium (Cr)	<0.000002%	Sulfated Ash	<0.001%	
		Copper (Cu)	<0.000001%			
		Iron (Fe)	<0.000001%			
		Germanium (Ge)	<0.000005%			
		Potassium (K)	<0.000001%			
		Lithium (Li)	<0.000001%			
		Magnesium (Mg)	<0.000001%			
		Manganese (Mn)	<0.000001%			
		Molybdenum (Mo)	<0.000002%			
		Sodium (Na)	<0.000005%			
DANGER.  				Art. Nr.	Pack	Pack Type
				CL00.1915.1000	1 l	GVB
				CL00.1915.2500	2,5 l	GVB
				CL00.1915.5000	5 l	PEB

Don't see the exact solution you need?

E-mail us the Tailor Made Standard Quotation request form in the back of the catalog.

Nitric acid 7 mol/l (ultra pure)

CL05.1909

 For laboratory use, AAS and ICP, Cold Vapour Hg det. 441.07 g HNO₃ / l H₂O = ± 7 N

Mol.Weight 63.01 g/mol Density 1.22 g/ml CasNr 7697-37-2 EINECS 231-714-2 HS Nr 28080000 HNrs H314-H290 PNrs P280-P301 + P330 + P331-P305 + P351 + P338-P309 + P310 DANGER.	UN 2031 ADR 8,II IATA 8,II IMDG 8,II	<table border="0" style="width: 100%; border-collapse: collapse;"> <tr><td>Aluminium (Al)</td><td style="text-align: right;"><0.030ppm</td></tr> <tr><td>Arsenic (As)</td><td style="text-align: right;"><0.005ppm</td></tr> <tr><td>Gold (Au)</td><td style="text-align: right;"><0.004ppm</td></tr> <tr><td>Barium (Ba)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Beryllium (Be)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Bismuth (Bi)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Calcium (Ca)</td><td style="text-align: right;"><0.05ppm</td></tr> <tr><td>Cadmium (Cd)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Cobalt (Co)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Chromium (Cr)</td><td style="text-align: right;"><0.010ppm</td></tr> <tr><td>Copper (Cu)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Iron (Fe)</td><td style="text-align: right;"><0.01ppm</td></tr> <tr><td>Gallium (Ga)</td><td style="text-align: right;"><0.020ppm</td></tr> <tr><td>Germanium (Ge)</td><td style="text-align: right;"><0.004ppm</td></tr> <tr><td>Mercury (Hg)</td><td style="text-align: right;"><0.0005ppm</td></tr> <tr><td>Indium (In)</td><td style="text-align: right;"><0.002ppm</td></tr> <tr><td>Potassium (K)</td><td style="text-align: right;"><0.005ppm</td></tr> <tr><td>Lithium (Li)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Magnesium (Mg)</td><td style="text-align: right;"><0.01ppm</td></tr> <tr><td>Manganese (Mn)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Molybdenum (Mo)</td><td style="text-align: right;"><0.005ppm</td></tr> <tr><td>Sodium (Na)</td><td style="text-align: right;"><0.200ppm</td></tr> <tr><td>Nickel (Ni)</td><td style="text-align: right;"><0.001ppm</td></tr> </table>	Aluminium (Al)	<0.030ppm	Arsenic (As)	<0.005ppm	Gold (Au)	<0.004ppm	Barium (Ba)	<0.001ppm	Beryllium (Be)	<0.001ppm	Bismuth (Bi)	<0.001ppm	Calcium (Ca)	<0.05ppm	Cadmium (Cd)	<0.001ppm	Cobalt (Co)	<0.001ppm	Chromium (Cr)	<0.010ppm	Copper (Cu)	<0.001ppm	Iron (Fe)	<0.01ppm	Gallium (Ga)	<0.020ppm	Germanium (Ge)	<0.004ppm	Mercury (Hg)	<0.0005ppm	Indium (In)	<0.002ppm	Potassium (K)	<0.005ppm	Lithium (Li)	<0.001ppm	Magnesium (Mg)	<0.01ppm	Manganese (Mn)	<0.001ppm	Molybdenum (Mo)	<0.005ppm	Sodium (Na)	<0.200ppm	Nickel (Ni)	<0.001ppm
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Perchloric acid 70% (ultra pure)

CL00.1629

 For laboratory use, AAS and ICP 70+% HClO₄

Mol.Weight 100.46 g/mol Density 1.68 g/ml CasNr 7601-90-3 EINECS 231-512-4 HS Nr 28111980 HNrs H271-H314 PNrs P210-P220-P280-P301 + P330 + P331-P305 + P351 + P338-P309 + P310 DANGER.	UN 1873 ADR 5.1 (8),I IATA 5.1 (8),I IMDG 5.1 (8),I	<table border="0" style="width: 100%; border-collapse: collapse;"> <tr><td>Assay</td><td style="text-align: right;">>70%</td></tr> <tr><td>Phosphate</td><td style="text-align: right;"><0.1ppm</td></tr> <tr><td>Sulfate</td><td style="text-align: right;"><5ppm</td></tr> <tr><td>Nitrogen (N)</td><td style="text-align: right;"><10ppm</td></tr> <tr><td>Silver (Ag)</td><td style="text-align: right;"><0.002ppm</td></tr> <tr><td>Aluminium (Al)</td><td style="text-align: right;"><0.005ppm</td></tr> <tr><td>Arsenic (As)</td><td style="text-align: right;"><0.01ppm</td></tr> <tr><td>Gold (Au)</td><td style="text-align: right;"><0.005ppm</td></tr> <tr><td>Barium (Ba)</td><td style="text-align: right;"><0.01ppm</td></tr> <tr><td>Beryllium (Be)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Bismuth (Bi)</td><td style="text-align: right;"><0.005ppm</td></tr> <tr><td>Calcium (Ca)</td><td style="text-align: right;"><0.03ppm</td></tr> <tr><td>Cadmium (Cd)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Cobalt (Co)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Copper (Cu)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Chromium (Cr)</td><td style="text-align: right;"><0.001ppm</td></tr> <tr><td>Iron (Fe)</td><td style="text-align: right;"><0.01ppm</td></tr> <tr><td>Gallium (Ga)</td><td style="text-align: right;"><0.005ppm</td></tr> <tr><td>Mercury (Hg)</td><td style="text-align: right;"><0.005ppm</td></tr> <tr><td>Indium (In)</td><td style="text-align: right;"><0.002ppm</td></tr> <tr><td>Potassium (K)</td><td style="text-align: right;"><0.02ppm</td></tr> </table>	Assay	>70%	Phosphate	<0.1ppm	Sulfate	<5ppm	Nitrogen (N)	<10ppm	Silver (Ag)	<0.002ppm	Aluminium (Al)	<0.005ppm	Arsenic (As)	<0.01ppm	Gold (Au)	<0.005ppm	Barium (Ba)	<0.01ppm	Beryllium (Be)	<0.001ppm	Bismuth (Bi)	<0.005ppm	Calcium (Ca)	<0.03ppm	Cadmium (Cd)	<0.001ppm	Cobalt (Co)	<0.001ppm	Copper (Cu)	<0.001ppm	Chromium (Cr)	<0.001ppm	Iron (Fe)	<0.01ppm	Gallium (Ga)	<0.005ppm	Mercury (Hg)	<0.005ppm	Indium (In)	<0.002ppm	Potassium (K)	<0.02ppm
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Phosphoric acid 85% (ultra pure)

CL00.0615

 For laboratory use, AAS and ICP 85+% H₃PO₄

Mol.Weight 98.00 g/mol Density 1.71 g/ml CasNr 7664-38-2 EINECS 231-633-2 HS Nr 28092000 HNrs H314-H290 PNrs P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338 DANGER.	UN 1805 ADR 8,III IATA 8,III IMDG 8,III	<table border="0" style="width: 100%; border-collapse: collapse;"> <tr><td>Assay</td><td style="text-align: right;">>85%</td></tr> <tr><td>Chloride</td><td style="text-align: right;"><0.5ppm</td></tr> <tr><td>Fluoride</td><td style="text-align: right;"><0.5ppm</td></tr> <tr><td>Nitrate</td><td style="text-align: right;"><0.5ppm</td></tr> <tr><td>Sulfate</td><td style="text-align: right;"><10ppm</td></tr> <tr><td>Aluminium (Al)</td><td style="text-align: right;"><0.1ppm</td></tr> <tr><td>Arsenic (As)</td><td style="text-align: right;"><0.05ppm</td></tr> <tr><td>Barium (Ba)</td><td style="text-align: right;"><0.1ppm</td></tr> <tr><td>Calcium (Ca)</td><td style="text-align: right;"><0.2ppm</td></tr> <tr><td>Cadmium (Cd)</td><td style="text-align: right;"><0.05ppm</td></tr> <tr><td>Cobalt (Co)</td><td style="text-align: right;"><0.05ppm</td></tr> <tr><td>Chromium (Cr)</td><td style="text-align: right;"><0.05ppm</td></tr> <tr><td>Copper (Cu)</td><td style="text-align: right;"><0.05ppm</td></tr> <tr><td>Iron (Fe)</td><td style="text-align: right;"><0.2ppm</td></tr> <tr><td>Mercury (Hg)</td><td style="text-align: right;"><0.005ppm</td></tr> <tr><td>Potassium (K)</td><td style="text-align: right;"><0.1ppm</td></tr> <tr><td>Lithium (Li)</td><td style="text-align: right;"><0.1ppm</td></tr> <tr><td>Magnesium (Mg)</td><td style="text-align: right;"><0.1ppm</td></tr> <tr><td>Manganese (Mn)</td><td style="text-align: right;"><0.05ppm</td></tr> </table>	Assay	>85%	Chloride	<0.5ppm	Fluoride	<0.5ppm	Nitrate	<0.5ppm	Sulfate	<10ppm	Aluminium (Al)	<0.1ppm	Arsenic (As)	<0.05ppm	Barium (Ba)	<0.1ppm	Calcium (Ca)	<0.2ppm	Cadmium (Cd)	<0.05ppm	Cobalt (Co)	<0.05ppm	Chromium (Cr)	<0.05ppm	Copper (Cu)	<0.05ppm	Iron (Fe)	<0.2ppm	Mercury (Hg)	<0.005ppm	Potassium (K)	<0.1ppm	Lithium (Li)	<0.1ppm	Magnesium (Mg)	<0.1ppm	Manganese (Mn)	<0.05ppm
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		<table border="0" style="width: 100%; border-collapse: collapse;"> <tr><td>Sodium (Na)</td><td style="text-align: right;"><0.1ppm</td></tr> <tr><td>Nickel (Ni)</td><td style="text-align: right;"><0.05ppm</td></tr> <tr><td>Lead (Pb)</td><td style="text-align: right;"><0.05ppm</td></tr> <tr><td>Strontium (Sr)</td><td style="text-align: right;"><0.1ppm</td></tr> <tr><td>Thallium (Tl)</td><td style="text-align: right;"><0.05ppm</td></tr> <tr><td>Zinc (Zn)</td><td style="text-align: right;"><0.05ppm</td></tr> </table>	Sodium (Na)	<0.1ppm	Nickel (Ni)	<0.05ppm	Lead (Pb)	<0.05ppm	Strontium (Sr)	<0.1ppm	Thallium (Tl)	<0.05ppm	Zinc (Zn)	<0.05ppm																										
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Art. Nr.	Pack	Pack Type																																						
CL00.0615.0250	250 ml	PE																																						
CL00.0615.1000	1 l	PE/H																																						



Acids for ICP Trace Analysis

Sulfuric acid 93-98% (Pico-Pure Plus)

NEW CL00.2649

For laboratory use, ICP-MS trace analysis

93-98+% H₂SO₄

Mol.Weight	98.08 g/mol	UN	1830
Density	1.84 g/ml	ADR	8,II
CasNr	7664-93-9	IATA	8,II
EINECS	231-639-5	IMDG	8,II
HS Nr	28070000		
HNrs	H290-H314		
PNrs	P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		

DANGER.



Assay	: 93-98%
Aluminium (Al)	<50ppt
Antimony (Sb)	<50ppt
Arsenic (As)	<500ppt
Barium (Ba)	<10ppt
Beryllium (Be)	<10ppt
Bismuth (Bi)	<10ppt
Cadmium (Cd)	<10ppt
Calcium (Ca)	<50ppt
Cerium (Ce)	<10ppt
Caesium (Cs)	<10ppt

Chromium (Cr)	<10ppt
Cobalt (Co)	<10ppt
Copper (Cu)	<10ppt
Dysprosium (Dy)	<10ppt
Erbium (Er)	<10ppt
Europium (Eu)	<10ppt
Gadolinium (Gd)	<10ppt
Gallium (Ga)	<10ppt
Germanium (Ge)	<100ppt
Hafnium (Hf)	<10ppt
Holmium (Ho)	<10ppt
Indium (In)	<10ppt
Iron (Fe)	<50ppt
Lanthanum (La)	<10ppt
Lead (Pb)	<10ppt
Lithium (Li)	<10ppt
Iodide (I)	<10ppt
Magnesium (Mg)	<50ppt
Manganese (Mn)	<10ppt
Mercury (Hg)	<100ppt
Molybdenum (Mo)	<10ppt
Neodymium (Nd)	<10ppt
Nickel (Ni)	<50ppt
Niobium (Nb)	<10ppt
Palladium (Pd)	: Information only
Platinum (Pt)	: Information only
Potassium (K)	<50ppt
Praseodymium (Pr)	<10ppt
Rhodium (Rh)	<50ppt
Rubidium (Rb)	<10ppt

Samarium (Sm)	<10ppt
Scandium (Sc)	<10ppt
Selenium (Se)	<500ppt
Silver (Ag)	<50ppt
Sodium (Na)	<50ppt
Strontium (Sr)	<10ppt
Tantalum (Ta)	: Information only
Tellurium (Te)	<50ppt
Terbium (Tb)	<10ppt
Thallium (Tl)	<10ppt
Thorium (Th)	<10ppt
Thulium (Tm)	<10ppt
Tin (Sn)	<50ppt
Titanium (Ti)	<50ppt
Tungsten (W)	<10ppt
Uranium (U)	<10ppt
Vanadium (V)	<10ppt
Ytterbium (Yb)	<10ppt
Yttrium (Y)	<10ppt
Zinc (Zn)	<50ppt
Zirconium (Zr)	<10ppt

Art. Nr.	Pack	Pack Type
CL00.2649.0250	250 ml	FEP
CL00.2649.0500	500 ml	FEP

Sulfuric acid 93-98% (Pico-Pure)

NEW CL00.2650

For laboratory use, ICP-MS trace analysis

93-98+% H₂SO₄

Mol.Weight	98.08 g/mol	UN	1830
Density	1.84 g/ml	ADR	8,II
CasNr	7664-93-9	IATA	8,II
EINECS	231-639-5	IMDG	8,II
HS Nr	28070000		
HNrs	H290-H314		
PNrs	P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		

DANGER.



Assay	: 93-98%
Aluminium (Al)	<1ppb
Antimony (Sb)	<1ppb
Arsenic (As)	<0.5ppb
Barium (Ba)	<0.1ppb
Beryllium (Be)	<0.1ppb
Bismuth (Bi)	<0.1ppb
Cadmium (Cd)	<0.5ppb
Calcium (Ca)	<1ppb
Cerium (Ce)	<0.1ppb
Caesium (Cs)	<0.1ppb
Chromium (Cr)	<0.5ppb
Cobalt (Co)	<0.5ppb

Copper (Cu)	<0.5ppb
Dysprosium (Dy)	<0.1ppb
Erbium (Er)	<0.1ppb
Europium (Eu)	<0.1ppb
Gadolinium (Gd)	<0.1ppb
Gallium (Ga)	<0.1ppb
Germanium (Ge)	<1ppb
Gold (Au)	<0.5ppb
Hafnium (Hf)	<0.1ppb
Holmium (Ho)	<0.1ppb
Indium (In)	<0.1ppb
Iron (Fe)	<1ppb
Lanthanum (La)	<0.1ppb
Lead (Pb)	<0.1ppb
Lithium (Li)	<0.5ppb
Lutetium (Lu)	<0.1ppb
Magnesium (Mg)	<1ppb
Manganese (Mn)	<0.5ppb
Mercury (Hg)	<0.1ppb
Molybdenum (Mo)	<0.5ppb
Neodymium (Nd)	<0.1ppb
Nickel (Ni)	<0.5ppb
Niobium (Nb)	<0.1ppb
Palladium (Pd)	: Information only
Platinum (Pt)	: Information only
Potassium (K)	<1ppb
Praseodymium (Pr)	<0.1ppb
Rhodium (Rh)	<0.5ppb
Rubidium (Rb)	<0.5ppb
Samarium (Sm)	<0.1ppb
Scandium (Sc)	<0.1ppb
Selenium (Se)	<10ppt

Silver (Ag)	<1ppb
Strontium (Sr)	<0.5ppb
Tantalum (Ta)	: Information only
Tellurium (Te)	<0.1ppb
Terbium (Tb)	<0.1ppb
Thallium (Tl)	<0.1ppb
Thorium (Th)	<0.1ppb
Thulium (Tm)	<0.1ppb
Tin (Sn)	<1ppb
Titanium (Ti)	<1ppb
Tungsten (W)	<0.5ppb
Uranium (U)	<0.1ppb
Vanadium (V)	<0.5ppb
Ytterbium (Yb)	<0.1ppb
Yttrium (Y)	<0.1ppb
Zinc (Zn)	<1ppb
Zirconium (Zr)	<0.5ppb
Colour	<10APHA
Chloride	<0.7ppm
Nitrate	<0.2ppm
Phosphorus (P)	<0.05ppm
Reducing Substances	<20ppm

Art. Nr.	Pack	Pack Type
CL00.2650.0500	500 ml	FEP
CL00.2650.1000	1 l	FEP



Acids for ICP Trace Analysis

Sulfuric acid 96% (ultra pure)

CL00.2613

For laboratory use, AAS and ICP 95+% H2SO4


Mol.Weight 98.08 g/mol	UN 1830	Assay	>95%	Magnesium (Mg)	<0.01ppm
Density 1.84 g/ml	ADR 8,II	Chloride	<0.1ppm	Manganese (Mn)	<0.001ppm
CasNr 7664-93-9	IATA 8,II	Nitrate	<0.2ppm	Molybdenum (Mo)	<0.001ppm
EINECS 231-639-5	IMDG 8,II	Phosphate	<0.01ppm	Ammonium	<1ppm
HS Nr 28070000		Silver (Ag)	<0.001ppm	Sodium (Na)	<0.02ppm
HNrs H290-H314		Aluminium (Al)	<0.005ppm	Nickel (Ni)	<0.002ppm
PNrs P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		Arsenic (As)	<0.005ppm	Lead (Pb)	<0.001ppm
DANGER. 		Gold (Au)	<0.005ppm	Platinum (Pt)	<0.01ppm
		Barium (Ba)	<0.005ppm	Selenium (Se)	<0.001ppm
		Beryllium (Be)	<0.001ppm	Tin (Sn)	<0.001ppm
		Bismuth (Bi)	<0.005ppm	Strontium (Sr)	<0.001ppm
		Calcium (Ca)	<0.02ppm	Titanium (Ti)	<0.001ppm
		Cadmium (Cd)	<0.001ppm	Thallium (Tl)	<0.001ppm
		Cobalt (Co)	<0.001ppm	Vanadium (V)	<0.001ppm
		Chromium (Cr)	<0.001ppm	Zinc (Zn)	<0.005ppm
		Copper (Cu)	<0.001ppm	Zirconium (Zr)	<0.001ppm
		Iron (Fe)	<0.01ppm		
		Gallium (Ga)	<0.005ppm		
		Germanium (Ge)	<0.001ppm		
		Mercury (Hg)	<0.005ppm		
		Indium (In)	<0.002ppm		
		Potassium (K)	<0.01ppm		
		Lithium (Li)	<0.001ppm		

Art. Nr.	Pack	Pack Type
CL00.2613.0250	250 ml	GVB
CL00.2613.1000	1 l	GVB/H

Sulfuric acid 95-97% a.r., VLSI

CL00.2605

*For laboratory use, ISO, Ph. Eur., trace analysis 95-97% H2SO4


Mol.Weight 98.08 g/mol	UN 1830	Assay	: 95-97%	Sodium (Na)	<0.00005%
Density 1.84 g/ml	ADR 8,II	Residue after Ignition	<0.0005%	Nickel (Ni)	<0.000002%
CasNr 7664-93-9	IATA 8,II	Ammonium	<0.0002%	Lead (Pb)	<0.000002%
EINECS 231-639-5	IMDG 8,II	Silver (Ag)	<0.000002%	Strontium (Sr)	<0.000002%
HS Nr 28070000		Aluminium (Al)	<0.000005%	Titanium (Ti)	<0.000001%
HNrs H290-H314		Arsenic (As)	<0.000001%	Thallium (Tl)	<0.000005%
PNrs P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		Barium (Ba)	<0.000005%	Vanadium (V)	<0.000001%
DANGER. 		Beryllium (Be)	<0.000001%	Zinc (Zn)	<0.000005%
		Bismuth (Bi)	<0.000005%	Zirconium (Zr)	<0.00001%
		Calcium (Ca)	<0.00002%	Chloride	<0.00001%
		Cadmium (Cd)	<0.000002%	Nitrate	<0.00002%
		Cobalt (Co)	<0.000001%	Phosphate	<0.00005%
		Chromium (Cr)	<0.000005%	Reducing Substances	<0.0002%
		Copper (Cu)	<0.000001%		
		Iron (Fe)	<0.00001%		
		Germanium (Ge)	<0.000005%		
		Mercury (Hg)	<0.000005%		
		Potassium (K)	<0.00001%		
		Lithium (Li)	<0.000001%		
		Magnesium (Mg)	<0.000005%		
		Manganese (Mn)	<0.00001%		

Art. Nr.	Pack	Pack Type
CL00.2605.2500	2,5 l	GVB
CL00.2605.5000	5 l	PEB

Sulfuric acid 95-97% a.r.

CL00.2632

For laboratory use, ISO, Ph. Eur., trace analysis 95-97% H2SO4

Mol.Weight 98.08 g/mol	UN 1830	Assay	: 95-97%	Nickel (Ni)	<0.000002%
Density 1.84 g/ml	ADR 8,II	Residue after Ignition	<0.0005% @ 650°C	Lead (Pb)	<0.000002%
CasNr 7664-93-9	IATA 8,II	Ammonium	<0.0001%	Strontium (Sr)	<0.000002%
EINECS 231-639-5	IMDG 8,II	Silver (Ag)	<0.000002%	Titanium (Ti)	<0.00001%
HS Nr 28070000		Aluminium (Al)	<0.000005%	Thallium (Tl)	<0.000005%
HNrs H290-H314		Arsenic (As)	<0.000001%	Vanadium (V)	<0.000001%
PNrs P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		Barium (Ba)	<0.000005%	Zinc (Zn)	<0.000005%
DANGER. 		Beryllium (Be)	<0.000001%	Zirconium (Zr)	<0.00001%
		Bismuth (Bi)	<0.000005%	Chloride	<0.00001%
		Calcium (Ca)	<0.00002%	Nitrate	<0.00002%
		Cadmium (Cd)	<0.000002%	Phosphate	<0.00005%
		Cobalt (Co)	<0.000001%	Reducing Substances	<0.0002%
		Chromium (Cr)	<0.000005%	Nitrogen (N)	<0.0001%
		Copper (Cu)	<0.000001%	Colour	< 10 APHA
		Iron (Fe)	<0.00001%		
		Germanium (Ge)	<0.000005%		
		Mercury (Hg)	<0.000005%		
		Potassium (K)	<0.00001%		
		Lithium (Li)	<0.000001%		
		Magnesium (Mg)	<0.000005%		
		Manganese (Mn)	<0.000001%		
		Sodium (Na)	<0.00005%		

Art. Nr.	Pack	Pack Type
CL00.2632.1000	1 l	GVB
CL00.2632.2500	2,5 l	GVB

Acids for ICP Trace Analysis

Sulfuric acid 95-97% a.r. (Low Mercury)

NEW CL00.2644

For laboratory use, ACS, ISO, Ph. Eur., Hg max. 0.001 ppm, trace analysis

95-97% H₂SO₄

Mol.Weight 98.08 g/mol	UN 1830	Assay : 95-97%	Sodium (Na)	<0.00005%
Density 1.84 g/ml	ADR 8,II	Residue after Ignition <0.0005% @ 650°C	Nickel (Ni)	<0.000002%
CasNr 7664-93-9	IATA 8,II	Ammonium <0.0002%	Lead (Pb)	<0.000002%
EINECS 231-639-5	IMDG 8,II	Silver (Ag) <0.000002%	Strontium (Sr)	<0.000002%
HS Nr 28070000		Aluminium (Al) <0.000005%	Titanium (Ti)	<0.00001%
HNrs H290-H314		Arsenic (As) <0.000001%	Thallium (Tl)	<0.000005%
PNrs P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		Barium (Ba) <0.000005%	Vanadium (V)	<0.000001%
DANGER. 		Beryllium (Be) <0.000001%	Zinc (Zn)	<0.000005%
		Bismuth (Bi) <0.000005%	Zirconium (Zr)	<0.00001%
		Calcium (Ca) <0.000002%	Chloride	<0.00001%
		Cadmium (Cd) <0.000002%	Nitrate	<0.00002%
		Cobalt (Co) <0.000001%	Phosphate	<0.00005%
		Chromium (Cr) <0.000005%	Reducing Substances	<0.0002%
		Copper (Cu) <0.000001%	Nitrogen (N)	<0.0001%
		Iron (Fe) <0.00001%	Colour	< 10 APHA
		Germanium (Ge) <0.000005%		
		Mercury (Hg) <0.0000001%	Art. Nr.	Pack
		Potassium (K) <0.00001%	CL00.2644.2500	2,5 l
		Lithium (Li) <0.000001%		Pack Type
		Magnesium (Mg) <0.000005%		GVB/H
		Manganese (Mn) <0.00001%		

Tetra fluoroboric acid 38% solution (ultra pure)

CL00.2009

For laboratory use, AAS and ICP

380 g HBF₄ / kg sol.


Mol.Weight 87.81 g/mol	UN 1775	Chloride <0.5ppm	Lithium (Li)	<0.001ppm
Density 1.25 g/ml	ADR 8,II	Hexafluorosilicate <20ppm	Magnesium (Mg)	<0.005ppm
CasNr 16872-11-0	IATA 8,II	Phosphate <0.1ppm	Manganese (Mn)	<0.001ppm
EINECS 240-898-3	IMDG 8,II	Sulfate <0.5ppm	Molybdenum (Mo)	<0.001ppm
HS Nr 28111980		Sulfite <2ppm	Sodium (Na)	<0.01ppm
HNrs H314		Silver (Ag) <0.001ppm	Nickel (Ni)	<0.001ppm
PNrs P280-P305 + P351 + P338-P310		Aluminium (Al) <0.005ppm	Lead (Pb)	<0.002ppm
DANGER. 		Arsenic (As) <0.02ppm	Tin (Sn)	<0.001ppm
		Gold (Au) <0.002ppm	Strontium (Sr)	<0.001ppm
		Barium (Ba) <0.01ppm	Titanium (Ti)	<0.01ppm
		Beryllium (Be) <0.001ppm	Thallium (Tl)	<0.001ppm
		Bismuth (Bi) <0.001ppm	Vanadium (V)	<0.001ppm
		Calcium (Ca) <0.01ppm	Zinc (Zn)	<0.005ppm
		Cadmium (Cd) <0.002ppm	Zirconium (Zr)	<0.001ppm
		Cobalt (Co) <0.002ppm	Residue after Ignition	<2ppm
		Chromium (Cr) <0.001ppm		
		Copper (Cu) <0.001ppm	Art. Nr.	Pack
		Iron (Fe) <0.01ppm	CL00.2009.0250	250 ml
		Gallium (Ga) <0.005ppm	CL00.2009.1000	1 l
		Germanium (Ge) <0.002ppm		Pack Type
		Mercury (Hg) <0.02ppm		PE
		Indium (In) <0.002ppm		PE/H
		Potassium (K) <0.01ppm		

Tetra fluoroboric acid solution (ultra pure)

CL02.2025

TMR - For laboratory use, AAS and ICP

192 g H₃BO₃ + 450 ml HF 40%

Mol.Weight 87.81 g/mol	UN 1775	Chloride <0.5ppm	Potassium (K)	<0.01ppm
Density 1.23 g/ml	ADR 8,II	Hexafluorosilicate <20ppm	Lithium (Li)	<0.001ppm
CasNr 16872-11-0	IATA 8,II	Phosphate <0.1ppm	Magnesium (Mg)	<0.005ppm
EINECS 240-898-3	IMDG 8,II	Sulfate <0.5ppm	Manganese (Mn)	<0.001ppm
HS Nr 28111980		Sulfite <2ppm	Molybdenum (Mo)	<0.001ppm
HNrs H314		Silver (Ag) <0.001ppm	Sodium (Na)	<0.01ppm
PNrs P280-P305 + P351 + P338-P310		Aluminium (Al) <0.005ppm	Nickel (Ni)	<0.001ppm
DANGER. 		Arsenic (As) <0.02ppm	Lead (Pb)	<0.002ppm
		Gold (Au) <0.002ppm	Tin (Sn)	<0.001ppm
		Barium (Ba) <0.01ppm	Strontium (Sr)	<0.001ppm
		Beryllium (Be) <0.001ppm	Titanium (Ti)	<0.01ppm
		Bismuth (Bi) <0.001ppm	Thallium (Tl)	<0.001ppm
		Calcium (Ca) <0.01ppm	Vanadium (V)	<0.001ppm
		Cadmium (Cd) <0.002ppm	Zinc (Zn)	<0.005ppm
		Cobalt (Co) <0.002ppm	Zirconium (Zr)	<0.001ppm
		Chromium (Cr) <0.001ppm	Residue after Ignition	<2ppm
		Copper (Cu) <0.001ppm		
		Iron (Fe) <0.01ppm	Art. Nr.	Pack
		Gallium (Ga) <0.005ppm	CL02.2025.2500	2,5 l
		Germanium (Ge) <0.002ppm		Pack Type
		Mercury (Hg) <0.02ppm		PE
		Indium (In) <0.002ppm		

Acids for ICP Trace Analysis

Water, High Purity ICP-MS grade (Pico-Pure Plus)

NEW CL02.2107

For laboratory use, ICP-MS trace analysis

H₂O - LF < 1 µS - 0.2 µm filtrated (ppt range HM traces)

Mol.Weight 18.016 g/mol	Dysprosium (Dy)	<1ppt	Ruthenium (Ru)	<10ppt
Density 1.00 g/ml	Erbium (Er)	<1ppt	Samarium (Sm)	<10ppt
CasNr 7732-18-5	Europium (Eu)	<1ppt	Scandium (Sc)	<10ppt
EINECS 231-791-2	Gadolinium (Gd)	<1ppt	Selenium (Se)	<50ppt
HS Nr 28530010	Gallium (Ga)	<10ppt	Silver (Ag)	<10ppt
Colour	Germanium (Ge)	<10ppt	Sodium (Na)	<10ppt
Chloride	Gold (Au)	<10ppt	Strontium (Sr)	<10ppt
Phosphate	Hafnium (Hf)	<1ppt	Tantalum (Ta)	<10ppt
Sulfite	Holmium (Ho)	<1ppt	Tellurium (Te)	<10ppt
Aluminium (Al)	Indium (In)	<1ppt	Terbium (Tb)	<10ppt
Antimony (Sb)	Iron (Fe)	<10ppt	Thallium (Tl)	<10ppt
Arsenic (As)	Lanthanum (La)	<1ppt	Thorium (Th)	<1ppt
Barium (Ba)	Lead (Pb)	<10ppt	Thulium (Tm)	<10ppt
Beryllium (Be)	Lithium (Li)	<10ppt	Tin (Sn)	<10ppt
Bismuth (Bi)	Lutetium (Lu)	<1ppt	Titanium (Ti)	<10ppt
Boron (B)	Magnesium (Mg)	<10ppt	Tungsten (W)	<10ppt
Cadmium (Cd)	Manganese (Mn)	<10ppt	Uranium (U)	<1ppt
Calcium (Ca)	Mercury (Hg)	<20ppt	Vanadium (V)	<10ppt
Cerium (Ce)	Molybdenum (Mo)	<10ppt	Ytterbium (Yb)	<10ppt
Caesium (Cs)	Neodymium (Nd)	<1ppt	Yttrium (Y)	<1ppt
Chromium (Cr)	Nickel (Ni)	<10ppt	Zinc (Zn)	<10ppt
Cobalt (Co)	Niobium (Nb)	<10ppt	Zirconium (Zr)	<10ppt
Copper (Cu)	Palladium (Pd)	<10ppt		
	Platinum (Pt)	<10ppt		
	Potassium (K)	<10ppt		
	Praseodymium (Pr)	<10ppt		
	Rhenium (Re)	<10ppt		
	Rhodium (Rh)	<10ppt		
	Rubidium (Rb)	<10ppt		

Art. Nr.	Pack	Pack Type
CL02.2107.1000	1 l	LDPE

ACIDS & REAGENTS FOR ICP & AA



Product Analysis Certificate

Page 1 of 2

Art. Nr. : CL00.1964 Lot Nr. : 26.4632501

Nitric acid 67-69% (Pico-Pure Plus)
67-69% HNO₃

Use: For laboratory use, ICP-MS trace analysis

Traceability: Reference standards

Specifications

	Spec. value	Batch value
Assay	: 67.69%	: 67.69%
Aluminium (Al)	Al <20ppt	<20ppt
Antimony (Sb)	Sb <10ppt	<10ppt
Arsenic (As)	As <20ppt	<20ppt
Barium (Ba)	Ba <10ppt	<10ppt
Beryllium (Be)	Be <10ppt	<10ppt
Bismuth (Bi)	Bi <10ppt	<10ppt
Boron (B)	B <10ppt	<10ppt
Cadmium (Cd)	Cd <10ppt	<10ppt
Calcium (Ca)	Ca <10ppt	<10ppt
Cerium (Ce)	Ce <10ppt	<10ppt
Caesium (Cs)	Cs <10ppt	<10ppt
Chromium (Cr)	Cr <10ppt	<10ppt
Cobalt (Co)	Co <10ppt	<10ppt
Copper (Cu)	Cu <10ppt	<10ppt
Dysprosium (Dy)	Dy <1ppt	<1ppt
Erbium (Er)	Er <1ppt	<1ppt
Europium (Eu)	Eu <1ppt	<1ppt
Gadolinium (Gd)	Gd <1ppt	<1ppt
Gallium (Ga)	Ga <10ppt	<10ppt
Germanium (Ge)	Ge <10ppt	<10ppt
Gold (Au)	Au <20ppt	<20ppt
Hafnium (Hf)	Hf <10ppt	<10ppt
Holmium (Ho)	Ho <1ppt	<1ppt
Indium (In)	In <1ppt	<1ppt
Iron (Fe)	Fe <10ppt	<10ppt
Lanthanum (La)	La <1ppt	<1ppt
Lead (Pb)	Pb <10ppt	<10ppt
Lithium (Li)	Li <10ppt	<10ppt
Lutetium (Lu)	Lu <1ppt	<1ppt
Magnesium (Mg)	Mg <10ppt	<10ppt
Manganese (Mn)	Mn <10ppt	<10ppt
Mercury (Hg)	Hg <50ppt	<50ppt
Molybdenum (Mo)	Mo <10ppt	<10ppt
Neodymium (Nd)	Nd <1ppt	<1ppt
Nickel (Ni)	Ni <20ppt	<20ppt
Niobium (Nb)	Nb <1ppt	<1ppt
Palladium (Pd)	Pd <20ppt	<20ppt
Platinum (Pt)	Pt <20ppt	<20ppt
Potassium (K)	K <10ppt	<10ppt
Praseodymium (Pr)	Pr <1ppt	<1ppt
Rhenium (Re)	Re <10ppt	<10ppt
Rhodium (Rh)	Rh <10ppt	<10ppt

Chemist: Luis Bianchi

Date of release: 25-01-2018

Expires: Jan-2023

CHEM LAB NV

Industriezone "De Arend" 2 B-8210 ZEDELGEM - BELGIUM

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Analysis



Product Analysis Certificate

Page 2 of 2

Art. Nr. : CL00.1964 Lot Nr. : 26.4632501

Nitric acid 67-69% (Pico-Pure Plus)
67-69% HNO₃

Use: For laboratory use, ICP-MS trace analysis

Traceability: Reference standards

Specifications

	Spec. value	Batch value
Rubidium (Rb)	Rb <10ppt	<10ppt
Ruthenium (Ru)	Ru <20ppt	<20ppt
Samarium (Sm)	Sm <10ppt	<10ppt
Scandium (Sc)	Sc <10ppt	<10ppt
Selenium (Se)	Se : Information only	: Information only
Silver (Ag)	Ag <10ppt	<10ppt
Sodium (Na)	Na <10ppt	<10ppt
Strontium (Sr)	Sr <10ppt	<10ppt
Tantalum (Ta)	Ta : Information only	: Information only
Tellurium (Te)	Te <1ppt	<1ppt
Terbium (Tb)	Tb <1ppt	<1ppt
Thallium (Tl)	Tl <10ppt	<10ppt
Thorium (Th)	Th <1ppt	<1ppt
Thulium (Tm)	Tm <1ppt	<1ppt
Tin (Sn)	Sn <20ppt	<20ppt
Titanium (Ti)	Ti <10ppt	<10ppt
Tungsten (W)	W <10ppt	<10ppt
Uranium (U)	U <1ppt	<1ppt
Vanadium (V)	V <10ppt	<10ppt
Ytterbium (Yb)	Yb <1ppt	<1ppt
Yttrium (Y)	Y <1ppt	<1ppt
Zinc (Zn)	Zn <10ppt	<10ppt
Zirconium (Zr)	Zr <10ppt	<10ppt

Chemist: Luis Bianchi

Date of release: 25-01-2018

Expires: Jan-2023

CHEM LAB NV

Industriezone "De Arend" 2 B-8210 ZEDELGEM - BELGIUM

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Analysis

Ammonia 25 weight % solution (ultra pure)

CL00.0161

For laboratory use, AAS and ICP ± 250 g NH₃ / kg

Mol.Weight 17.03 g/mol	UN 2672	Residue after Ignition	<2ppm	Potassium (K)	<0.005ppm
Density 0.91 g/ml	ADR 8,III	Carbonate	<10ppm	Lithium (Li)	<0.002ppm
CasNr 1336-21-6	IATA 8,III	Chloride	<0.5ppm	Magnesium (Mg)	<0.005ppm
EINECS 215-647-6	IMDG 8,III	Phosphate	<0.05ppm	Manganese (Mn)	<0.001ppm
HS Nr 28142000		Sulfate	<0.5ppm	Molybdenum (Mo)	<0.001ppm
HNrs H314-H335-H400		Silver (Ag)	<0.001ppm	Sodium (Na)	<0.02ppm
PNrs P280-P273-P301 + P330 + P331-P305 + P351 + P338-P309 + P310		Aluminium (Al)	<0.005ppm	Nickel (Ni)	<0.001ppm
		Arsenic (As)	<0.005ppm	Lead (Pb)	<0.001ppm
		Gold (Au)	<0.005ppm	Tin (Sn)	<0.001ppm
		Barium (Ba)	<0.005ppm	Strontium (Sr)	<0.001ppm
		Beryllium (Be)	<0.001ppm	Titanium (Ti)	<0.001ppm
		Bismuth (Bi)	<0.002ppm	Thallium (Tl)	<0.001ppm
		Calcium (Ca)	<0.01ppm	Vanadium (V)	<0.001ppm
		Cadmium (Cd)	<0.001ppm	Zinc (Zn)	<0.001ppm
		Cobalt (Co)	<0.001ppm	Zirconium (Zr)	<0.001ppm
		Chromium (Cr)	<0.001ppm		
		Copper (Cu)	<0.001ppm		
		Iron (Fe)	<0.005ppm		
		Gallium (Ga)	<0.005ppm		
		Germanium (Ge)	<0.001ppm		
		Mercury (Hg)	<0.005ppm		
		Indium (In)	<0.002ppm		

Art. Nr.	Pack	Pack Type
CL00.0161.0250	250 ml	PE/OD
CL00.0161.1000	1 l	PE/OD

Benzene (ultra pure)

CL00.0239

Reference substance for gas chromatography 99.99+% C₆H₆

Mol.Weight 78.11 g/mol	UN 1114	Assay	>99.99%		
Density 0.88 g/ml	ADR 3,II				
CasNr 71-43-2	IATA 3,II				
EINECS 200-753-7	IMDG 3,II				
HS Nr 29022000					
HNrs H225-H350-H340-H372-H304-H319-H315					
PNrs P201-P210-P308 + P313-P301 + P310-P331-P305 + P351 + P338-P302 + P352					

Art. Nr.	Pack	Pack Type
CL00.0239.0001	1 ml	AMP
CL00.0239.0005	5 ml	AMP

Boric acid (ultra pure)

CL00.0230

For laboratory use, AAS and ICP 99.8+% H₃BO₃

Mol.Weight 61.83 g/mol		Assay	>99.8%	Potassium (K)	<0.1ppm
Density 1.44 g/cm ³		Chloride	<3ppm	Lithium (Li)	<0.01ppm
CasNr 10043-35-3		Phosphate	<0.5ppm	Magnesium (Mg)	<0.1ppm
EINECS 233-139-2		Silicate	<0.5ppm	Manganese (Mn)	<0.01ppm
HS Nr 28100090		Sulfate	<5ppm	Molybdenum (Mo)	<0.01ppm
HNrs H360		Silver (Ag)	<0.01ppm	Sodium (Na)	<0.05ppm
PNrs P201-P308 + P313		Aluminium (Al)	<0.05ppm	Nickel (Ni)	<0.01ppm
		Arsenic (As)	<0.05ppm	Lead (Pb)	<0.02ppm
		Gold (Au)	<0.02ppm	Strontium (Sr)	<0.01ppm
		Barium (Ba)	<0.05ppm	Thallium (Tl)	<0.02ppm
		Beryllium (Be)	<0.01ppm	Vanadium (V)	<0.01ppm
		Calcium (Ca)	<0.05ppm	Zinc (Zn)	<0.01ppm
		Cadmium (Cd)	<0.01ppm		
		Cobalt (Co)	<0.01ppm		
		Copper (Cu)	<0.01ppm		
		Iron (Fe)	<0.05ppm		
		Gallium (Ga)	<0.05ppm		
		Indium (In)	<0.02ppm		

Art. Nr.	Pack	Pack Type
CL00.0230.0050	50 g	PE
CL00.0230.0500	500 g	PE



Boric acid 4% solution (ultra pure)

CL02.0220

HF neutralisation solution for ICP 40 g H3BO3/ l H2O

Mol.Weight 61.83 g/mol	Chloride	<0.2ppm	Lithium (Li)	<0.5ppb
Density 1.00 g/ml	Phosphate	<25ppb	Magnesium (Mg)	<4ppb
CasNr 10043-35-3	Silicate	<25ppb	Manganese (Mn)	<0.5ppb
EINECS 233-139-2	Sulfate	<200ppb	Molybdenum (Mo)	<0.5ppb
HS Nr 28100090	Silver (Ag)	<0.5ppb	Sodium (Na)	<2ppb
	Aluminium (Al)	<2ppb	Nickel (Ni)	<0.5ppb
	Arsenic (As)	<2ppb	Lead (Pb)	<1ppb
	Gold (Au)	<1ppb	Strontium (Sr)	<0.5ppb
	Barium (Ba)	<2ppb	Thallium (Tl)	<1ppb
	Beryllium (Be)	<0.5ppb	Vanadium (V)	<0.5ppb
	Calcium (Ca)	<2ppb	Zinc (Zn)	<0.5ppb
	Cadmium (Cd)	<0.5ppb		
	Cobalt (Co)	<0.5ppb	Art. Nr.	Pack
	Copper (Cu)	<0.5ppb	CL02.0220.1000	1 l
	Iron (Fe)	<2ppb	CL02.0220.5000	5 l
	Gallium (Ga)	<2ppb		Pack Type
	Indium (In)	<1ppb		PE/H
	Potassium (K)	<4ppb		PE

Calcium carbonate, powder (ultra pure)

CL00.0390

For laboratory use 99.95+% CaCO3

Mol.Weight 100.09 g/mol	Assay	>99.95%	Strontium (Sr)	<0.1%
Density 2.93 g/cm3	Insoluble Matter (Non Solubles)	<0.002%	Chloride	<0.001%
CasNr 471-34-1	Barium (Ba)	<0.005%	Sulfate	<0.005%
EINECS 207-439-9	Copper (Cu)	<0.0005%	Nitrogen (N)	<0.001%
HS Nr 28365000	Iron (Fe)	<0.001%	Silicon (Si)	<0.001%
	Potassium (K)	<0.01%	Fluoride	<<0.002%
	Magnesium (Mg)	<0.01%	Art. Nr.	Pack
	Sodium (Na)	<0.01%	CL00.0390.0050	50 g
	Lead (Pb)	<0.0005%		Pack Type
				PE

Cesium chloride (ultra pure)

CL00.0354

For laboratory use, AAS and ICP, Density gradient centrifugation 99.995+% CsCl

Mol.Weight 168.36 g/mol	Assay	>99.995%	Manganese (Mn)	<0.01ppm
Density 3.97 g/cm3	Sulfate	<20ppm	Sodium (Na)	<4ppm
CasNr 7647-17-8	Nitrogen (N)	<10ppm	Nickel (Ni)	<0.002ppm
EINECS 231-600-2	Aluminium (Al)	<0.02ppm	Lead (Pb)	<0.005ppm
HS Nr 28273985	Boron (B)	<0.05ppm	Rubidium (Rb)	<5ppm
	Barium (Ba)	<2ppm	Strontium (Sr)	<0.2ppm
	Calcium (Ca)	<0.1ppm	Thallium (Tl)	<0.01ppm
	Cadmium (Cd)	<0.005ppm	Zinc (Zn)	<0.02ppm
	Cobalt (Co)	<0.005ppm	Art. Nr.	Pack
	Copper (Cu)	<0.005ppm	CL00.0354.0025	25 g
	Iron (Fe)	<0.02ppm	CL00.0354.0100	100 g
	Potassium (K)	<2ppm		Pack Type
	Lithium (Li)	<0.2ppm		PE
	Magnesium (Mg)	<0.05ppm		PE

Hydrogen peroxide 30 weight % solution (ultra pure)

CL00.2313

*For laboratory use, AAS and ICP 30+% H2O2

Mol.Weight 34.01 g/mol	UN 2014	Free Acid	<40ppm	Molybdenum (Mo)	<0.001ppm
Density 1.11 g/ml	ADR 5.1 (8),II	Silver (Ag)	<0.001ppm	Sodium (Na)	<0.02ppm
CasNr 7722-84-1	IATA 5.1 (8),II	Aluminium (Al)	<0.005ppm	Nickel (Ni)	<0.002ppm
EINECS 231-765-0	IMDG 5.1 (8),II	Arsenic (As)	<0.01ppm	Lead (Pb)	<0.005ppm
HS Nr 28470000		Gold (Au)	<0.005ppm	Platinum (Pt)	<0.02ppm
HNrs H271-H302-H314-H318-H335-H412		Boron (B)	<0.01ppm	Antimony (Sb)	<0.02ppm
PNrs P210-P310-P301 + P330 + P331-P305 + P351 + P338-P303 + P361 + P353-P280		Barium (Ba)	<0.005ppm	Tin (Sn)	<0.002ppm
DANGER.   		Beryllium (Be)	<0.001ppm	Strontium (Sr)	<0.001ppm
		Bismuth (Bi)	<0.002ppm	Titanium (Ti)	<0.001ppm
		Calcium (Ca)	<0.02ppm	Thallium (Tl)	<0.002ppm
		Cadmium (Cd)	<0.001ppm	Vanadium (V)	<0.001ppm
		Cobalt (Co)	<0.002ppm	Zinc (Zn)	<0.005ppm
		Chromium (Cr)	<0.001ppm	Zirconium (Zr)	<0.001ppm
		Copper (Cu)	<0.001ppm	Chloride	<5ppm
		Iron (Fe)	<0.01ppm	Phosphate	<1ppm
		Gallium (Ga)	<0.005ppm	Sulfate	<1ppm
		Germanium (Ge)	<0.05ppm	Nitrogen (N)	<2ppm
		Indium (In)	<0.002ppm		
		Potassium (K)	<0.005ppm	Art. Nr.	Pack
		Lithium (Li)	<0.001ppm	CL00.2313.1000	1 l
		Magnesium (Mg)	<0.005ppm		Pack Type
		Manganese (Mn)	<0.001ppm		PEB/OD
Assay	>30%				
Non Volatiles	<50ppm				
Residue after Ignition	<20ppm				

Lithium nitrate (ultra pure)

CL00.1219

For laboratory use, AAS and ICP 99+% LiNO₃**Mol.Weight** 68.95 g/mol**UN** 2722

Assay	>99%
Chloride	<10ppm
Sulfate	<10ppm
Aluminium (Al)	<0.02ppm
Barium (Ba)	<5ppm
Calcium (Ca)	<2ppm
Cadmium (Cd)	<0.005ppm
Cobalt (Co)	<0.005ppm
Caesium (Cs)	<5ppm
Copper (Cu)	<0.005ppm
Iron (Fe)	<0.05ppm
Potassium (K)	<5ppm
Magnesium (Mg)	<0.5ppm
Manganese (Mn)	<0.005ppm
Sodium (Na)	<20ppm
Nickel (Ni)	<0.005ppm
Lead (Pb)	<0.005ppm

Rubidium (Rb)	<0.5ppm
Strontium (Sr)	<5ppm
Thallium (Tl)	<0.01ppm
Zinc (Zn)	<0.005ppm

Density 2.36 g/cm³**ADR** 5.1,III**CasNr** 7790-69-4**IATA** 5.1,III**EINECS** 232-218-9**IMDG** 5.1,III**HS Nr** 28342980**HNrs** H272**PNrs** P262

WARNING.



Art. Nr.	Pack	Pack Type
CL00.1219.0100	100 g	PE
CL00.1219.0500	500 g	PE

Lithium nitrate 5 g/l solution (ultra pure)

CL02.1211

For laboratory use, AAS and ICP 5 g LiNO₃ / l H₂O**Density** 1.00 g/ml**CasNr** 7790-69-4**EINECS** 232-218-9**HS Nr** 28342980

Chloride	<1ppm
Sulfate	<1ppm
Aluminium (Al)	<0.002ppm
Barium (Ba)	<0.5ppm
Calcium (Ca)	<0.2ppm
Cadmium (Cd)	<0.0005ppm
Cobalt (Co)	<0.0005ppm
Caesium (Cs)	<0.5ppm
Copper (Cu)	<0.0005ppm
Iron (Fe)	<0.005ppm
Potassium (K)	<0.5ppm
Magnesium (Mg)	<0.005ppm
Manganese (Mn)	<0.0005ppm

Sodium (Na)	<2ppm
Nickel (Ni)	<0.0005ppm
Lead (Pb)	<0.0005ppm
Rubidium (Rb)	<0.05ppm
Strontium (Sr)	<0.5ppm
Thallium (Tl)	<0.001ppm
Zinc (Zn)	<0.0005ppm

Art. Nr.	Pack	Pack Type
CL02.1211.1000	1 l	PE/H
CL02.1211.5000	5 l	PE

Lithium tetraborate (ultra pure)

CL00.1218

For laboratory use, AAS and ICP 99.6+% Li₂B₄O₇**Mol.Weight** 169.12 g/mol**CasNr** 12007-60-2**EINECS** 234-514-3**HS Nr** 28402090**HNrs** H315-H319-H335**PNrs** P261-P305 + P351 + P338

WARNING.



Assay	>99.6%
Chloride	<5ppm
Phosphate	<2ppm
Sulfate	<5ppm
Heavy Metals as Lead (Pb)	<5ppm
Calcium (Ca)	<5ppm
Iron (Fe)	<1ppm
Potassium (K)	<5ppm
Magnesium (Mg)	<1ppm
Sodium (Na)	<5ppm

Art. Nr.	Pack	Pack Type
CL00.1218.0250	250 g	PE
CL00.1218.1000	1 kg	PE

Mercury (ultra pure)

CL00.1333

For laboratory use, AAS and ICP 99.999+% Hg

Mol.Weight 200.59 g/mol**UN** 2809**Density** 13.55 g/ml**ADR** 8 (6.1),III**CasNr** 7439-97-6**IATA** 8 (6.1),III**EINECS** 231-106-7**IMDG** 8 (6.1),III**HS Nr** 28054090**HNrs** H360D-H330-H372-H400-H410**PNrs** P201-P273-P309 + P310-P304 + P340

DANGER.



Assay	>99.999%
Aluminium (Al)	<0.05ppm
Barium (Ba)	<0.005ppm
Beryllium (Be)	<0.005ppm
Bismuth (Bi)	<0.005ppm
Calcium (Ca)	<0.05ppm
Cadmium (Cd)	<0.005ppm
Cobalt (Co)	<0.005ppm
Chromium (Cr)	<0.005ppm
Chromium (Cr)	<0.005ppm
Copper (Cu)	<0.005ppm
Iron (Fe)	<0.05ppm
Indium (In)	<0.005ppm
Potassium (K)	<0.1ppm
Lithium (Li)	<0.005ppm
Magnesium (Mg)	<0.005ppm
Manganese (Mn)	<0.005ppm
Molybdenum (Mo)	<0.005ppm
Sodium (Na)	<0.1ppm



Nickel (Ni)	<0.01ppm
Lead (Pb)	<0.005ppm
Tin (Sn)	<0.005ppm
Strontium (Sr)	<0.005ppm
Titanium (Ti)	<0.005ppm
Thallium (Tl)	<0.005ppm
Vanadium (V)	<0.005ppm
Zinc (Zn)	<0.005ppm

Art. Nr.	Pack	Pack Type
CL00.1333.0100	100 g	D50/P
CL00.1333.1000	1 kg	D50/P

Nitric acid 70% (ultra pure)

CL00.1934

For laboratory use, AAS and ICP 69+% HNO₃ - (Appearance of a yellowish tinge in the container has no impact on product quality).

Mol.Weight 63.01 g/mol	UN 2031	Silver (Ag)	<0.001ppm	Lead (Pb)	<0.0005ppm
Density 1.41 g/ml	ADR 8 (5.1),II	Aluminium (Al)	<0.030ppm	Tin (Sn)	<0.005ppm
CasNr 7697-37-2	IATA 8 (5.1),II	Arsenic (As)	<0.005ppm	Strontium (Sr)	<0.001ppm
EINECS 231-714-2	IMDG 8 (5.1),II	Gold (Au)	<0.004ppm	Titanium (Ti)	<0.001ppm
HS Nr 28080000		Barium (Ba)	<0.001ppm	Thallium (Tl)	<0.005ppm
HNrs H272-H314-H290		Beryllium (Be)	<0.001ppm	Vanadium (V)	<0.001ppm
PNrs P260-P280-P301 + P330 + P331-P309 + P310-P305 + P351 + P338		Bismuth (Bi)	<0.001ppm	Zinc (Zn)	<0.005ppm
DANGER.  		Calcium (Ca)	<0.05ppm	Zirconium (Zr)	<0.001ppm
Assay >69%		Cadmium (Cd)	<0.001ppm	Boron (B)	<0.004ppm
Chloride <0.04ppm		Cobalt (Co)	<0.001ppm	Selenium (Se)	<0.001ppm
Phosphate <0.1ppm		Chromium (Cr)	<0.010ppm	Antimony (Sb)	<0.005ppm
Sulfate <0.4ppm		Copper (Cu)	<0.001ppm	Niobium (Nb)	<0.001ppm
		Iron (Fe)	<0.01ppm	Silicon (Si)	<0.020ppm
		Gallium (Ga)	<0.020ppm	Tantalum (Ta)	<0.002ppm
		Germanium (Ge)	<0.004ppm	Non Volatiles	<2ppm
		Mercury (Hg)	<0.0005ppm		
		Indium (In)	<0.002ppm		
		Potassium (K)	<0.005ppm		
		Lithium (Li)	<0.001ppm		
		Magnesium (Mg)	<0.01ppm		
		Manganese (Mn)	<0.001ppm		
		Molybdenum (Mo)	<0.005ppm		
		Sodium (Na)	<0.200ppm		
		Nickel (Ni)	<0.001ppm		
				Art. Nr.	Pack
				CL00.1934.0500	500 ml
				CL00.1934.1000	1 l
					Pack Type
					GVB/H
					GVB/H

Perchloric acid 70% (ultra pure)

CL00.1629


For laboratory use, AAS and ICP 70+% HClO₄

Mol.Weight 100.46 g/mol	UN 1873	Assay >70%	Lithium (Li)	<0.001ppm
Density 1.68 g/ml	ADR 5.1 (8),I	Phosphate <0.1ppm	Magnesium (Mg)	<0.01ppm
CasNr 7601-90-3	IATA 5.1 (8),I	Sulfate <5ppm	Manganese (Mn)	<0.001ppm
EINECS 231-512-4	IMDG 5.1 (8),I	Nitrogen (N) <10ppm	Molybdenum (Mo)	<0.001ppm
HS Nr 28111980		Silver (Ag) <0.002ppm	Sodium (Na)	<0.05ppm
HNrs H271-H314		Aluminium (Al) <0.005ppm	Nickel (Ni)	<0.002ppm
PNrs P210-P220-P280-P301 + P330 + P331-P305 + P351 + P338-P309 + P310		Arsenic (As) <0.01ppm	Lead (Pb)	<0.005ppm
DANGER.  		Gold (Au) <0.005ppm	Tin (Sn)	<0.005ppm
		Barium (Ba) <0.01ppm	Strontium (Sr)	<0.001ppm
		Beryllium (Be) <0.001ppm	Titanium (Ti)	<0.001ppm
		Bismuth (Bi) <0.005ppm	Thallium (Tl)	<0.001ppm
		Calcium (Ca) <0.03ppm	Vanadium (V)	<0.001ppm
		Cadmium (Cd) <0.001ppm	Zinc (Zn)	<0.005ppm
		Cobalt (Co) <0.001ppm	Zirconium (Zr)	<0.001ppm
		Copper (Cu) <0.001ppm		
		Chromium (Cr) <0.001ppm		
		Iron (Fe) <0.01ppm		
		Gallium (Ga) <0.005ppm		
		Mercury (Hg) <0.005ppm		
		Indium (In) <0.002ppm		
		Potassium (K) <0.02ppm		
			Art. Nr.	Pack
			CL00.1629.0250	250 ml
			CL00.1629.1000	1 l
				Pack Type
				GVB
				GVB

Potassium bromide (ultra pure)

CL00.1126

For laboratory use, AAS and ICP 99.5+% KBr

Mol.Weight 119.01 g/mol	Assay >99.5%	Lead (Pb)	<0.005ppm
Density 2.75 g/cm ³	Bromate <10ppm	Strontium (Sr)	<0.1ppm
CasNr 7758-02-3	Chloride <500ppm	Thallium (Tl)	<0.01ppm
EINECS 231-830-3	Iodide (I) <200ppm	Zinc (Zn)	<0.01ppm
HS Nr 28275100	Sulfate <10ppm		
HNrs H319	Nitrogen (N) <10ppm		
PNrs P280-P305 + P351 + P338	Aluminium (Al) <0.01ppm		
WARNING. 	Barium (Ba) <2ppm		
	Calcium (Ca) <0.1ppm		
	Cadmium (Cd) <0.005ppm		
	Cobalt (Co) <0.005ppm		
	Copper (Cu) <0.005ppm		
	Iron (Fe) <0.001ppm		
	Magnesium (Mg) <0.1ppm		
	Manganese (Mn) <0.01ppm		
	Sodium (Na) <5ppm		
	Nickel (Ni) <0.005ppm		
		Art. Nr.	Pack
		CL00.1126.0100	100 g
		CL00.1126.0500	500 g
			Pack Type
			PE
			PE

A Certificate of Analysis is provided with each ICP standard stating:

- Actual certified concentration of the final solution
- Traceability to NIST
- Expiration date
- Trace impurities detected

Potassium chloride (ultra pure)

CL00.1125

For laboratory use, AAS and ICP 99.5+% KCl

Mol.Weight 74.55 g/mol	Assay	>99.5%	Manganese (Mn)	<0.01ppm
Density 1.88 g/cm ³	Phosphate	<5ppm	Sodium (Na)	<5ppm
CasNr 7447-40-7	Sulfate	<10ppm	Nickel (Ni)	<0.005ppm
EINECS 231-211-8	Nitrogen (N)	<10ppm	Lead (Pb)	<0.01ppm
HS Nr 31051000	Aluminium (Al)	<0.01ppm	Strontium (Sr)	<0.1ppm
	Barium (Ba)	<1ppm	Thallium (Tl)	<0.01ppm
	Calcium (Ca)	<0.1ppm	Zinc (Zn)	<0.005ppm
	Cadmium (Cd)	<0.005ppm		
	Cobalt (Co)	<0.005ppm	Art. Nr.	Pack
	Chromium (Cr)	<0.01ppm	CL00.1125.0050	50 g
	Copper (Cu)	<0.005ppm	CL00.1125.1000	1 kg
	Iron (Fe)	<0.01ppm		Pack Type
	Lithium (Li)	<0.4ppm		PE
	Magnesium (Mg)	<0.05ppm		PE

Rubidium sulfate (ultra pure)

CL00.1806

For laboratory use, AAS and ICP 99+% Rb₂SO₄

Mol.Weight 266.99 g/mol	Assay	>99%	Manganese (Mn)	<0.01ppm
Density 3.613 mg/cm ³	Aluminium (Al)	<0.05ppm	Sodium (Na)	<2ppm
CasNr 7488-54-2	Boron (B)	<0.05ppm	Nickel (Ni)	<0.005ppm
EINECS 231-301-7	Barium (Ba)	<2ppm	Lead (Pb)	<0.005ppm
	Calcium (Ca)	<0.01ppm	Strontium (Sr)	<0.1ppm
	Cadmium (Cd)	<0.005ppm	Thallium (Tl)	<0.01ppm
	Cobalt (Co)	<0.005ppm	Zinc (Zn)	<0.005ppm
	Caesium (Cs)	<20ppm		
	Copper (Cu)	<0.01ppm	Art. Nr.	Pack
	Iron (Fe)	<0.05ppm	CL00.1806.0025	25 g
	Potassium (K)	<500ppm	CL00.1806.0100	100 g
	Lithium (Li)	<0.4ppm		Pack Type
	Magnesium (Mg)	<0.05ppm		PE

Sodium acetate, anhydrous (ultra pure)

CL00.1427


For laboratory use, AAS and ICP 99+% CH₃COONa

Mol.Weight 82.03 g/mol	Assay	>99%	Magnesium (Mg)	<0.1ppm
Density 1.52 g/cm ³	Chloride	<5ppm	Manganese (Mn)	<0.05ppm
CasNr 127-09-3	Phosphate	<5ppm	Nickel (Ni)	<0.005ppm
EINECS 204-823-8	Sulfate	<20ppm	Lead (Pb)	<0.005ppm
HS Nr 29152900	Aluminium (Al)	<0.05ppm	Rubidium (Rb)	<0.5ppm
	Barium (Ba)	<5ppm	Strontium (Sr)	<0.1ppm
	Bismuth (Bi)	<0.01ppm	Thallium (Tl)	<0.005ppm
	Calcium (Ca)	<0.1ppm	Zinc (Zn)	<0.005ppm
	Cadmium (Cd)	<0.005ppm		
	Cobalt (Co)	<0.005ppm	Art. Nr.	Pack
	Chromium (Cr)	<0.01ppm	CL00.1427.0050	50 g
	Caesium (Cs)	<2ppm	CL00.1427.0500	500 g
	Copper (Cu)	<0.005ppm		Pack Type
	Iron (Fe)	<0.05ppm		PE
	Potassium (K)	<5ppm		PE

Tetra fluoroboric acid 38% solution (ultra pure)

CL00.2009

For laboratory use, AAS and ICP 380 g HBF₄ / kg sol.

Mol.Weight 87.81 g/mol	UN 1775	Chloride	<0.5ppm	Lithium (Li)	<0.001ppm
Density 1.25 g/ml	ADR 8,II	Hexafluorosilicate	<20ppm	Magnesium (Mg)	<0.005ppm
CasNr 16872-11-0	IATA 8,II	Phosphate	<0.1ppm	Manganese (Mn)	<0.001ppm
EINECS 240-898-3	IMDG 8,II	Sulfate	<0.5ppm	Molybdenum (Mo)	<0.001ppm
HS Nr 28111980		Sulfite	<2ppm	Sodium (Na)	<0.01ppm
HNrs H314		Silver (Ag)	<0.001ppm	Nickel (Ni)	<0.001ppm
PNrs P280-P305 + P351 + P338-P310		Aluminium (Al)	<0.005ppm	Lead (Pb)	<0.002ppm
DNrs P280-P305 + P351 + P338-P310		Arsenic (As)	<0.02ppm	Tin (Sn)	<0.001ppm
DANGER.		Gold (Au)	<0.002ppm	Strontium (Sr)	<0.001ppm
		Barium (Ba)	<0.01ppm	Titanium (Ti)	<0.01ppm
		Beryllium (Be)	<0.001ppm	Thallium (Tl)	<0.001ppm
		Bismuth (Bi)	<0.001ppm	Vanadium (V)	<0.001ppm
		Calcium (Ca)	<0.01ppm	Zinc (Zn)	<0.005ppm
		Cadmium (Cd)	<0.002ppm	Zirconium (Zr)	<0.001ppm
		Cobalt (Co)	<0.002ppm	Residue after Ignition	<2ppm
		Chromium (Cr)	<0.001ppm		
		Copper (Cu)	<0.001ppm	Art. Nr.	Pack
		Iron (Fe)	<0.01ppm	CL00.2009.0250	250 ml
		Gallium (Ga)	<0.005ppm	CL00.2009.1000	1 l
		Germanium (Ge)	<0.002ppm		Pack Type
		Mercury (Hg)	<0.02ppm		PE
		Indium (In)	<0.002ppm		PE/H
		Potassium (K)	<0.01ppm		

Tetra fluoroboric acid solution (ultra pure)

CL02.2025



TMR - For laboratory use, AAS and ICP 192 g H3BO3 + 450 ml HF 40%

Mol.Weight 87.81 g/mol	UN 1775	Chloride	<0.5ppm	Potassium (K)	<0.01ppm
Density 1.23 g/ml	ADR 8,II	Hexafluorosilicate	<20ppm	Lithium (Li)	<0.001ppm
CasNr 16872-11-0	IATA 8,II	Phosphate	<0.1ppm	Magnesium (Mg)	<0.005ppm
EINECS 240-898-3	IMDG 8,II	Sulfate	<0.5ppm	Manganese (Mn)	<0.001ppm
HS Nr 28111980		Sulfite	<2ppm	Molybdenum (Mo)	<0.001ppm
HNrs H314		Silver (Ag)	<0.001ppm	Sodium (Na)	<0.01ppm
PNrs P280-P305 + P351 + P338-P310		Aluminium (Al)	<0.005ppm	Nickel (Ni)	<0.001ppm
DANGER.		Arsenic (As)	<0.02ppm	Lead (Pb)	<0.002ppm
		Gold (Au)	<0.002ppm	Tin (Sn)	<0.001ppm
		Barium (Ba)	<0.01ppm	Strontium (Sr)	<0.001ppm
		Beryllium (Be)	<0.001ppm	Titanium (Ti)	<0.01ppm
		Bismuth (Bi)	<0.001ppm	Thallium (Tl)	<0.001ppm
		Calcium (Ca)	<0.01ppm	Vanadium (V)	<0.001ppm
		Cadmium (Cd)	<0.002ppm	Zinc (Zn)	<0.005ppm
		Cobalt (Co)	<0.002ppm	Zirconium (Zr)	<0.001ppm
		Chromium (Cr)	<0.001ppm	Residue after Ignition	<2ppm
		Copper (Cu)	<0.001ppm		
		Iron (Fe)	<0.01ppm	Art. Nr.	Pack
		Gallium (Ga)	<0.005ppm	CL02.2025.2500	2,5 l
		Germanium (Ge)	<0.002ppm		Pack Type
		Mercury (Hg)	<0.02ppm		PE
		Indium (In)	<0.002ppm		

Toluene (ultra pure)

CL00.2035

Reference substance for gas chromatography 99.99+% C7H8

Mol.Weight 92.14 g/mol	UN 1294	Assay	>99.99%	Art. Nr.	Pack	Pack Type
Density 0.87 g/ml	ADR 3,II			CL00.2035.1000	1 l	GVB
CasNr 108-88-3	IATA 3,II					
EINECS 203-625-9	IMDG 3,II					
HS Nr 29023000						
HNrs H225-H361-H304-H373-H315-H336						
PNrs P210-P301 + P310-P331-P302 + P352						
DANGER.	  					

Water (ultra pure)

CL02.2101

For laboratory use, AAS and ICP, ASTM D-94, D-129 H2O - LF < 1 µS - 0.4 µm, UV filtrated

Mol.Weight 18.016 g/mol	Non Volatiles	< 1 ppm	Sodium (Na)	<0.01 ppm
Density 1.00 g/ml	Chloride	< 0.05 ppm	Nickel (Ni)	<0.0004 ppm
CasNr 7732-18-5	Fluoride	< 0.05 ppm	Lead (Pb)	<0.001 ppm
EINECS 231-791-2	Nitrate	< 0.01 ppm	Palladium (Pd)	<0.008 ppm
HS Nr 28530010	Phosphate	< 0.01 ppm	Platinum (Pt)	<0.001 ppm
	Silicate	<0.01 ppm	Antimony (Sb)	<0.001 ppm
	Sulfate	<0.1 ppm	Selenium (Se)	<0.0001 ppm
	Silver (Ag)	<0.0004 ppm	Tin (Sn)	<0.001 ppm
	Aluminium (Al)	<0.002 ppm	Strontium (Sr)	<0.0004 ppm
	Arsenic (As)	<0.002 ppm	Titanium (Ti)	<0.001 ppm
	Gold (Au)	<0.001 ppm	Thallium (Tl)	<0.00005 ppm
	Boron (B)	<0.005 ppm	Vanadium (V)	<0.001 ppm
	Barium (Ba)	<0.001 ppm	Zinc (Zn)	<0.004 ppm
	Beryllium (Be)	<0.002 ppm	Zirconium (Zr)	<0.001 ppm
	Bismuth (Bi)	<0.001 ppm		
	Calcium (Ca)	<0.005 ppm	Art. Nr.	Pack
	Cadmium (Cd)	<0.001 ppm	CL02.2101.5000	5 l
	Cobalt (Co)	<0.001 ppm	CL02.2101.9010	10 l
	Chromium (Cr)	<0.0004 ppm	CL02.2101.9025	25 l
	Copper (Cu)	<0.0004 ppm	CL02.2101.9520	20 l
	Iron (Fe)	<0.001 ppm		Pack Type
	Potassium (K)	<0.005 ppm		PE
	Lithium (Li)	<0.002 ppm		PE
	Magnesium (Mg)	<0.005 ppm		PE
	Manganese (Mn)	<0.0004 ppm		EP
	Molybdenum (Mo)	<0.002 ppm		

Water for Inorganic Analysis Methods

Water, High Purity ICP-MS grade (Pico-Pure Plus)

NEW CL02.2107

For laboratory use, ICP-MS trace analysis H₂O - LF < 1 µS - 0.2 µm filtrated (ppt range HM traces)

Mol.Weight 18.016 g/mol	Dysprosium (Dy)	<1ppt	Ruthenium (Ru)	<10ppt
Density 1.00 g/ml	Erbium (Er)	<1ppt	Samarium (Sm)	<10ppt
CasNr 7732-18-5	Europium (Eu)	<1ppt	Scandium (Sc)	<10ppt
EINECS 231-791-2	Gadolinium (Gd)	<1ppt	Selenium (Se)	<50ppt
HS Nr 28530010	Gallium (Ga)	<10ppt	Silver (Ag)	<10ppt
Colour <10APHA	Germanium (Ge)	<10ppt	Sodium (Na)	<10ppt
Chloride <1ppt	Gold (Au)	<10ppt	Strontium (Sr)	<10ppt
Phosphate <1ppt	Hafnium (Hf)	<1ppt	Tantalum (Ta)	<10ppt
Sulfite <1ppt	Holmium (Ho)	<1ppt	Tellurium (Te)	<1ppt
Aluminium (Al) <20ppt	Indium (In)	<1ppt	Terbium (Tb)	<10ppt
Antimony (Sb) <10ppt	Iron (Fe)	<10ppt	Thallium (Tl)	<10ppt
Arsenic (As) <10ppt	Lanthanum (La)	<1ppt	Thorium (Th)	<1ppt
Barium (Ba) <10ppt	Lead (Pb)	<10ppt	Thulium (Tm)	<10ppt
Beryllium (Be) <10ppt	Lithium (Li)	<10ppt	Tin (Sn)	<10ppt
Bismuth (Bi) <10ppt	Lutetium (Lu)	<1ppt	Titanium (Ti)	<10ppt
Boron (B) <20ppt	Magnesium (Mg)	<10ppt	Tungsten (W)	<10ppt
Cadmium (Cd) <10ppt	Manganese (Mn)	<10ppt	Uranium (U)	<1ppt
Calcium (Ca) <10ppt	Mercury (Hg)	<20ppt	Vanadium (V)	<10ppt
Cerium (Ce) <10ppt	Molybdenum (Mo)	<10ppt	Ytterbium (Yb)	<10ppt
Caesium (Cs) <10ppt	Neodymium (Nd)	<1ppt	Yttrium (Y)	<1ppt
Chromium (Cr) <10ppt	Nickel (Ni)	<10ppt	Zinc (Zn)	<10ppt
Cobalt (Co) <10ppt	Niobium (Nb)	<10ppt	Zirconium (Zr)	<10ppt
Copper (Cu) <10ppt	Palladium (Pd)	<10ppt		
	Platinum (Pt)	<10ppt	Art. Nr.	Pack
	Potassium (K)	<10ppt	CL02.2107.1000	1 l
	Praseodymium (Pr)	<10ppt		Pack Type
	Rhenium (Re)	<10ppt		LDPE
	Rhodium (Rh)	<10ppt		
	Rubidium (Rb)	<10ppt		

Water (ultra pure)

CL02.2101

For laboratory use, AAS and ICP, ASTM D-94, D-129 H₂O - LF < 1 µS - 0.4 µm, UV filtrated

Mol.Weight 18.016 g/mol	Non Volatiles	< 1 ppm	Sodium (Na)	<0.01 ppm
Density 1.00 g/ml	Chloride	< 0.05 ppm	Nickel (Ni)	<0.0004 ppm
CasNr 7732-18-5	Fluoride	< 0.05 ppm	Lead (Pb)	<0.001 ppm
EINECS 231-791-2	Nitrate	< 0.01 ppm	Palladium (Pd)	<0.008 ppm
HS Nr 28530010	Phosphate	< 0.01 ppm	Platinum (Pt)	<0.001 ppm
	Silicate	<0.01 ppm	Antimony (Sb)	<0.001 ppm
	Sulfate	<0.1 ppm	Selenium (Se)	<0.0001 ppm
	Silver (Ag)	<0.0004 ppm	Tin (Sn)	<0.001 ppm
	Aluminium (Al)	<0.002 ppm	Strontium (Sr)	<0.0004 ppm
	Arsenic (As)	<0.002 ppm	Titanium (Ti)	<0.001 ppm
	Gold (Au)	<0.001 ppm	Thallium (Tl)	<0.00005 ppm
	Boron (B)	<0.005 ppm	Vanadium (V)	<0.001 ppm
	Barium (Ba)	<0.001 ppm	Zinc (Zn)	<0.004 ppm
	Beryllium (Be)	<0.002 ppm	Zirconium (Zr)	<0.001 ppm
	Bismuth (Bi)	<0.001 ppm		
	Calcium (Ca)	<0.005 ppm	Art. Nr.	Pack
	Cadmium (Cd)	<0.001 ppm	CL02.2101.5000	5 l
	Cobalt (Co)	<0.001 ppm	CL02.2101.9010	10 l
	Chromium (Cr)	<0.0004 ppm	CL02.2101.9025	25 l
	Copper (Cu)	<0.0004 ppm	CL02.2101.9520	20 l
	Iron (Fe)	<0.001 ppm		Pack Type
	Potassium (K)	<0.005 ppm		PE
	Lithium (Li)	<0.002 ppm		PE
	Magnesium (Mg)	<0.005 ppm		PE
	Manganese (Mn)	<0.0004 ppm		EP
	Molybdenum (Mo)	<0.002 ppm		

Water, IC grade

NEW CL02.2115

For laboratory use & Ion Chromatography H₂O - LF < 2 µS - 0.2 µm filtrated

Mol.Weight 18.016 g/mol	Non Volatiles	<5ppm	Cadmium (Cd)	<0.005µg/l
Density 1.00 g/ml	Conductivity	<2µS	Cobalt (Co)	<0.005µg/l
CasNr 7732-18-5	Acetate	<10 µg/l	Chromium (Cr)	<0.005µg/l
EINECS 231-791-2	Formate	<10 µg/l	Copper (Cu)	<0.005µg/l
HS Nr 28530010	Glycolate	<10 µg/l	Iron (Fe)	<0.005µg/l
	Oxalate	<10 µg/l	Potassium (K)	<0.01µg/l
	Bromate	<1 µg/l	Lithium (Li)	<0.005µg/l
	Bromide	<1 µg/l	Magnesium (Mg)	<0.005µg/l
	Chlorate	<1 µg/l	Manganese (Mn)	<0.005µg/l
	Chloride	<1 µg/l	Molybdenum (Mo)	<0.005µg/l
	Fluoride	<1 µg/l	Ammonia	<0.01µg/l
	Iodide (I)	<1 µg/l	Sodium (Na)	<0.01µg/l
	Nitrate	<1 µg/l	Nickel (Ni)	<0.005µg/l
	Nitrite	<1 µg/l	Lead (Pb)	<0.005µg/l
	Phosphate	<1 µg/l	Strontium (Sr)	<0.005µg/l
	Sulfate	<1 µg/l		
	Aluminium (Al)	<0.005µg/l	Art. Nr.	Pack
	Barium (Ba)	<0.005µg/l	CL02.2115.5000	5 l
	Bismuth (Bi)	<0.005µg/l		Pack Type
	Calcium (Ca)	<0.01µg/l		FL/HDPE

Water (double distilled pyrogen free)

CL02.0208

For laboratory use H₂O - LF < 5 µS

Mol.Weight 18.016 g/mol

Density 1.00 g/ml

CasNr 7732-18-5

EINECS 231-791-2

HS Nr 28530010

Art. Nr.	Pack	Pack Type
CL02.0208.5000	5 l	PE
CL02.0208.9010	10 l	PE

Water Demineralised

CL02.2102

For laboratory use H₂O - LF < 5 µS

Mol.Weight 18.016 g/mol

Density 1.00 g/ml

CasNr 7732-18-5

EINECS 231-791-2

HS Nr 28530010

Non Volatiles

< 5 ppm

Art. Nr.	Pack	Pack Type
CL02.2102.9010	10 l	PE
CL02.2102.9025	25 l	PE

