



Manufacturer of Reference Standard  
Materials and Analytical Reagents

# CRM CATALOG

## 2020 - 2021

We study to develop new products routinely so  
you can always search our new products on  
our website: [www.labsertchemical.com](http://www.labsertchemical.com)



Labsert Chemical  
is a part of Labsert Ltd

## ABOUT LABSERT

**Labsert** started its operations in 2015 to manufacture of certified reference standard materials, analytical reagents and volumetric solutions as Labsert Chemical. In this direction, infrastructure and quality operations have been completed and firstly, manufacture of analytical inorganic and organic standards and reagents has been initiated. After 2019, new manufacturing lines about Quechers kits, SPE columns and mechatronic systems were added into our process with ongoing research and development activities.

Labsert has ISO 9001 certification from DAKKS (National accreditation body for the Federal Republic of Germany). All analysis and tests during certification works are carried out at our sub-contracted business partnership laboratory (ISO 17025 accredited by TURKAK: AB-0375-T) and/or Labsert laboratories. Detailed result of analysis is presented on a report which is prepared according to ISO 17034 assessment (Certified by Turcert: 20180718172822). Our manufacturing capacity is registered by The Union of Chambers and Commodity Exchanges of Turkey (TOBB) with a capacity report. Our manufacturing capacity is officially controlled by TOBB during our capacity report's currency.

Specialists of basic sciences, engineering, finance and foreign trade as well as professionals having significant experience in quality management, instrumental analysis and laboratory processes take part within the organization of Labsert. The process from manufacture to shipment is carried out in conformity with international quality system and standards. We provide our services with a great happiness and pride to national and international universities, research and development centers, analysis laboratories, public institutions as well as many private companies interested in our product portfolio.

### Important Differences

- Customer and Distributor Services
- Flexible Manufacturing Process
- Simple "Mix Reference Standard" Search Options
- Product Groups Specific to Country Legislation
- Quality Management
- Price Advantage



## QUALITY ASSURANCE

### Conformity with International standards

Quality understanding is a matter handled and managed at the highest level within Labsert. This is also a matter used as a management system not only in manufacturing process but also in fields such as management of customer services, shipments, human resources etc. Labsert has ISO 9001 certification. All analysis and tests during certification works are carried out at ISO 17025 accredited laboratories. Manufacture of the standards is implemented according to ISO 17034 conditions. Labsert is the first registered private company in reference material producer database of Turkish Accreditation Agency (TURKAK). Labsert's manufacturing capacity is registered by The Union of Chambers and Commodity Exchanges of Turkey (TOBB) with a capacity report. Our manufacturing capacity is officially controlled by TOBB during our capacity report's currency.

### Analysis Quality of Certification Process

Quality and results of reference standards certification process are among the most important issues for users. As Labsert, we apply a process beyond recognized international certification conditions at this point in order to ensure international quality and to keep reliability of results at the highest level. In addition to generally applied international certification analysis processes:

### Raw Materials and Packaging Quality

All raw materials used for manufacture of reference materials are selected at minimum purity level of 98%- 99.999% depending on production field and under possible supply conditions. All solvents used for manufacture are ultra-pure (Chromatography grade). Temperature and humidity controls are carried out and recorded daily in manufacturing and storage areas. HDPE or glass bottles are used for product packaging.

### NIST Traceability

Manufacture of reference standards meets conditions to ensure NIST or SI unit based traceability. During instrumental quantitative analysis within our certification process, calibration curves are generated by NIST traceable certified reference materials. Furthermore, calibration is also carried out by weights having NIST traceability for all mass measurements used for certification.



# IMPORTANT DIFFERENCES

## - Customer Services

Quality of customer services is a matter handled with the highest importance level within Labsert. Customer services department is not a section established only to make sales, to present offers etc. and far beyond all these, specialists having sufficient experiences and competences to provide consultancy during all stages from the first meeting to end of the service have been selected and assigned. Correct answers to your questions about all theoretical, production, shipment, payment etc. have been presented to you upon discussion with related specialists. You shall be contacted at the latest within 24 hours for all your questions and demands. Thus, you won't have to carry out process-conclusion follow-up of your questions or potential issues and you won't incur loss of time.

## - Flexible Manufacturing Process

Manufacturing of Custom-made reference standards as well as stock manufacturing are concluded quickly. You can easily create your special manufacture requests at our web site or consult us about all theoretical matters in relation with your demand.

## - Simple "Mix Reference Standard" Search Options

For many users, searching desired reference standard blends at the web site is very difficult as well as being obliged to examine all lists one by one in order to find related mixtures is a matter which causes loss of time. We have included the section "Simple Mix Standard Search" in our web site to avoid it and thus, this difficulty and loss of time has been prevented.

Select Component

Type Name of the component or it's formula and select from the list to add as filter. To delete added component, click on it's name below.





**Aluminum (Al)** **Beryllium (Be)**

### 2 Component as Filter

The suggested concentrations belong to the catalogue product

**4 Inorganic Products** [Make Custom Request](#)

You can add products listed below, or you can see the details by clicking on it's name or orange button located left side of the products's code.

	Ref.No	Vol.	Product Name	Price
	ICP125.M28003	125ml	125ml-Calibration Standard - 28003	130 €
	ICP125.M28004	125ml	125ml-Calibration Standard - 28004	150 €
	ICP250.M28003	250ml	250ml-Calibration Standard - 28003	182 €
	ICP250.M28004	250ml	250ml-Calibration Standard - 28004	210 €

### Description

10 mg/l [Al] Aluminium, 10 mg/l [As] Arsenic, 10 mg/l [Ba] Barium, 10 mg/l [Be] Beryllium, 10 mg/l [Cd] Cadmium, 10 mg/l [Cr] Chromium, 10 mg/l [Co] Cobalt, 10 mg/l [Cu] Copper, 10 mg/l [Pb] Lead, 10 mg/l [Mn] Manganese, 10 mg/l [Ni] Nickel, 10 mg/l [Se] Selenium, 10 mg/l [Ag] Silver, 10 mg/l [Tl] Thallium, 10 mg/l [Th] Thorium, 10 mg/l [U] Uranium, 10 mg/l [V] Vanadium, 10 mg/l [Zn] Zinc

## - Product Groups Specific to Country Legislation

Labsert is the first company in the international area to manufacture calibration reference solutions which are specially prepared pursuant to countries' legislative limits and ready to use for analysts. We help users with our calibration solution packages manufactured at 5 concentration points including limit values to establish their analytical device calibration curves without making any preliminary preparation. Furthermore, we may diversify these packages as per customers' special needs.



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# ICP

## REFERENCE STANDARD

### SOLUTIONS



ICP Mixture Reference Standards			
Product No	Explanation	Matrix	Volume
ICP125.M28001	Be: 10, Co: 10, In: 10, Pb: 10, Mg: 10 (mg/l) in %3 HNO3	3% HNO3	100 ml
ICP125.M28002	Bi: 10, Ge: 10, In: 10, 6Li: 10, Sc: 10, Tb: 10, Y: 10 (mg/l) in %5 HNO3	5% HNO3	100 ml
ICP125.M28003	10 mg/l [Al] Aluminium, 10 mg/l [As] Arsenic, 10 mg/l [Ba] Barium, 10 mg/l [Be] Beryllium, 10 mg/l [Cd] Cadmium, 10 mg/l [Cr] Chromium, 10 mg/l [Co] Cobalt, 10 mg/l [Cu] Copper, 10 mg/l [Pb] Lead, 10 mg/l [Mn] Manganese, 10 mg/l [Ni] Nickel, 10 mg/l [Se] Selenium, 10 mg/l [Ag] Silver, 10 mg/l [Tl] Thallium, 10 mg/l [Th] Thorium, 10 mg/l [U] Uranium, 10 mg/l [V] Vanadium, 10 mg/l [Zn] Zinc in %2 HNO3	2% HNO3	100 ml
ICP125.M28004	20 mg/l [Al] Aluminium, 20 mg/l [As] Arsenic, 2 mg/l [Ba] Barium, 1 mg/l [Be] Beryllium, 2 mg/l [B] Boron, 2 mg/l [Cd] Cadmium, 10 mg/l [Ca] Calcium, 2 mg/l [Cr] Chromium, 2 mg/l [Cu] Copper, 2 mg/l [Fe] Iron, 20 mg/l [Pb] Lead, 2 mg/l [Li] Lithium, 1 mg/l [Mg] Magnesium, 1 mg/l [Mn] Manganese, 5 mg/l [Hg] Mercury, 5 mg/l [Ni] Nickel, 10 mg/l [P] Phosphorus, 100 mg/l [K] Potassium, 1 mg/l [Sc] Scandium, 20 mg/l [Se] Selenium, 20 mg/l [Na] Sodium, 1 mg/l [Sr] Strontium, 20 mg/l [Te] Tellurium, 2 mg/l [Ti] Titanium, 1 mg/l [Y] Yttrium, 2 mg/l [Zn] Zinc in %5 HCl	5% HCl	100 ml
ICP125.M28005	10 mg/l [Au] Gold, 10 mg/l [Ir] Iridium, 10 mg/l [Os] Osmium, 10 mg/l [Pd] Palladium, 10 mg/l [Pt] Platinum, 10 mg/l [Re] Rhenium, 10 mg/l [Rh] Rhodium, 10 mg/l [Ru] Ruthenium in %5 HCl	5% HCl	100 ml
ICP125.M28006	10 ug/ml [Ce] Cerium, 10 ug/ml [Dy] Dysprosium, 10 ug/ml [Er] Erbium, 10 ug/ml [Eu] Europium, 10 ug/ml [Gd] Gadolinium, 10 ug/ml [Ho] Holmium, 10 ug/ml [La] Lanthanum, 10 ug/ml [Lu] Lutetium, 10 ug/ml [Nd] Neodymium, 10 ug/ml [Pr] Praseodymium, 10 ug/ml [Sm] Samarium, 10 ug/ml [Sc] Scandium, 10 ug/ml [Tb] Terbium, 10 ug/ml [Th] Thorium, 10 ug/ml [Tm] Thulium, 10 ug/ml [U] Uranium, 10 ug/ml [Yb] Ytterbium, 10 ug/ml [Y] Yttrium in %5 HNO3	5% HNO3	100 ml
ICP125.M28007	100 mg/l [Be] Beryllium, 1000 mg/l [Fe] Iron, 1000 mg/l [Pb] Lead, 1000 mg/l [Mg] Magnesium, 200 mg/l [Ni] Nickel, 500 mg/l [Tl] Thallium in %5 HNO3	5% HNO3	100 ml
ICP125.M28008	[Sb] Antimony 500 mg/l, [As] Arsenic 1000 mg/l, [Ba] Barium 100 mg/l, [B] Boron 100 mg/l, [Cd] Cadmium 200 mg/l, [Ca] Calcium 1000 mg/l, [Cu] Copper 200 mg/l, [Mn] Manganese 200 mg/l, [Se] Selenium 500 mg/l, [Ag] Silver 50 mg/l in %5 HNO3	5% HNO3	100 ml
ICP125.M28009	[Al] Aluminium 1000 mg/l, [Cr] Chromium 500 mg/l, [Hg] Mercury 200 mg/l, [Zn] Zinc 500 mg/l in %5 HNO3	5% HNO3	100 ml
ICP125.M28010	10 mg/l [Ba] Barium, 10 mg/l [Be] Beryllium, 10 mg/l [Ce] Cerium, 10 mg/l [Co] Cobalt, 10 mg/l [In] Indium, 10 mg/l [Pb] Lead, 10 mg/l [Mg] Magnesium, 10 mg/l [Tl] Thallium, 10 mg/l [Th] Thorium in %2 HNO3	2% HNO3	100 ml
ICP125.M28011	100 mg/l [Bi] Bismuth, 100 mg/l [In] Indium, 100 mg/l [6Li] Lithium isotope 6, 100 mg/l [Sc] Scandium, 100 mg/l [Tb] Terbium, 100 mg/l [Y] Yttrium in %5 HNO3	5% HNO3	100 ml
ICP125.M28012	10 mg/l [Sb] Antimony, 10 mg/l [Ge] Germanium, 10 mg/l [Hf] Hafnium, 10 mg/l [Mo] Molybdenum, 10 mg/l [Nb] Niobium, 10 mg/l [Si] Silicon, 10 mg/l [Ta] Tantalum, 10 mg/l [Te] Tellurium, 10 mg/l [Sn] Tin, 10 mg/l [Ti] Titanium, 10 mg/l [W] Tungsten, 10 mg/l [Zr] Zirconium in %5 HNO3 tr HF	5% HNO3/Tr HF	100 ml
ICP125.M28013	100 mg/l [Cd] Cadmium, 100 mg/l [Cr] Chromium, 100 mg/l [Co] Cobalt, 100 mg/l [Cu] Copper, 100 mg/l [Fe] Iron, 100 mg/l [Pb] Lead, 100 mg/l [Mn] Manganese, 100 mg/l [Hg] Mercury, 100 mg/l [Ni] Nickel, 100 mg/l [Ag] Silver, 100 mg/l [Tl] Thallium, 100 mg/l [V] Vanadium, 100 mg/l [Zn] Zinc in %10 HNO3	10% HNO3	100 ml
ICP125.M28014	[Sb] Antimony 20 mg/l, [Mo] Molybdenum 20 mg/l, [Si] Silicon 20 mg/l, [Sn] Tin 20 mg/l, [Ti] Titanium 20 mg/l in %5 HNO3 tr HF	5% HNO3/Tr HF	100 ml
ICP125.M28015	ICP-MS Equivalent to Agilent 6 elements standard - ug/l Ce: 1, Co: 1, Li: 1, Mg: 1, Ti: 1, Y: 1 in %2 HNO3	2% HNO3	100 ml
ICP125.M28019	ICP-MS Equivalent to Ultra Scientific 26 elements standard - mg/l Ag: 100, Al: 100, As: 100, B: 100, Ba: 100, Be: 100, Ca: 100, Cd: 100, Co: 100, Cr: 100, Cu: 100, Fe: 100, K: 1000, Mg: 100, Mn: 100, Mo: 100, Na: 100, Ni: 100, Pb: 100, Sb: 100, Se: 100, Si: 50, Ti: 100, Tl: 100, V: 100, Zn: 100 in 5% HNO3 + Tr HF	5% HNO3/Tr HF	100 ml
ICP500.M28015	ICP-MS Equivalent to Agilent 6 elements standard - ug/l Ce: 1, Co: 1, Li: 1, Mg: 1, Ti: 1, Y: 1 in %2 HNO3	2% HNO3	500 ml
ICP250.M28003	10 mg/l [Al] Aluminium, 10 mg/l [As] Arsenic, 10 mg/l [Ba] Barium, 10 mg/l [Be] Beryllium, 10 mg/l [Cd] Cadmium, 10 mg/l [Cr] Chromium, 10 mg/l [Co] Cobalt, 10 mg/l [Cu] Copper, 10 mg/l [Pb] Lead, 10 mg/l [Mn] Manganese, 10 mg/l [Ni] Nickel, 10 mg/l [Se] Selenium, 10 mg/l [Ag] Silver, 10 mg/l [Tl] Thallium, 10 mg/l [Th] Thorium, 10 mg/l [U] Uranium, 10 mg/l [V] Vanadium, 10 mg/l [Zn] Zinc in %2 HNO3	2% HNO3	250 ml

ICP Mixture Reference Standards			
Product No	Explanation	Matrix	Volume
ICP250.M28004	20 mg/l [Al] Aluminium, 20 mg/l [As] Arsenic, 2 mg/l [Ba] Barium, 1 mg/l [Be] Beryllium, 2 mg/l [B] Boron, 2 mg/l [Cd] Cadmium, 10 mg/l [Ca] Calcium, 2 mg/l [Cr] Chromium, 2 mg/l [Cu] Copper, 2 mg/l [Fe] Iron, 20 mg/l [Pb] Lead, 2 mg/l [Li] Lithium, 1 mg/l [Mg] Magnesium, 1 mg/l [Mn] Manganese, 5 mg/l [Hg] Mercury, 5 mg/l [Ni] Nickel, 10 mg/l [P] Phosphorus, 100 mg/l [K] Potassium, 1 mg/l [Sc] Scandium, 20 mg/l [Se] Selenium, 20 mg/l [Na] Sodium, 1 mg/l [Sr] Strontium, 20 mg/l [Te] Tellurium, 2 mg/l [Ti] Titanium, 1 mg/l [Y] Yttrium, 2 mg/l [Zn] Zinc in %5 HCl	5% HCl	250 ml
ICP250.M28007	100 mg/l [Be] Beryllium, 1000 mg/l [Fe] Iron, 1000 mg/l [Pb] Lead, 1000 mg/l [Mg] Magnesium, 200 mg/l [Ni] Nickel, 500 mg/l [Tl] Thallium in %5 HNO3	5% HNO3	250 ml
ICP250.M28008	[Sb] Antimony 500 mg/l, [As] Arsenic 1000 mg/l, [Ba] Barium 100 mg/l, [B] Boron 100 mg/l, [Cd] Cadmium 200 mg/l, [Ca] Calcium 1000 mg/l, [Cu] Copper 200 mg/l, [Mn] Manganese 200 mg/l, [Se] Selenium 500 mg/l, [Ag] Silver 50 mg/l in %5 HNO3	5% HNO3	250 ml
ICP250.M28009	[Al] Aluminium 1000 mg/l, [Cr] Chromium 500 mg/l, [Hg] Mercury 200 mg/l, [Zn] Zinc 500 mg/l in %5 HNO3	5% HNO3	250 ml
ICP250.M28014	[Sb] Antimony 20 mg/l, [Mo] Molybdenum 20 mg/l, [Si] Silicon 20 mg/l, [Sn] Tin 20 mg/l, [Ti] Titanium 20 mg/l in %5 HNO3 tr HF	5% HNO3/Tr HF	250 ml
ICP250.M28002	Bi: 10, Ge: 10, In: 10, 6Li: 10, Sc: 10, Tb: 10, Y: 10 (mg/l) in %5 HNO3	5% HNO3	250 ml
ICP250.M28011	100 mg/l [Bi] Bismuth, 100 mg/l [In] Indium, 100 mg/l [6Li] Lithium isotope 6, 100 mg/l [Sc] Scandium, 100 mg/l [Tb] Terbium, 100 mg/l [Y] Yttrium in %5 HNO3	5% HNO3	250 ml
ICP250.M28005	10 mg/l [Au] Gold, 10 mg/l [Ir] Iridium, 10 mg/l [Os] Osmium, 10 mg/l [Pd] Palladium, 10 mg/l [Pt] Platinum, 10 mg/l [Re] Rhenium, 10 mg/l [Rh] Rhodium, 10 mg/l [Ru] Ruthenium in %5 HCl	5% HCl	250 ml
ICP250.M28006	10 ug/ml [Ce] Cerium, 10 ug/ml [Dy] Dysprosium, 10 ug/ml [Er] Erbium, 10 ug/ml [Eu] Europium, 10 ug/ml [Gd] Gadolinium, 10 ug/ml [Ho] Holmium, 10 ug/ml [La] Lanthanum, 10 ug/ml [Lu] Lutetium, 10 ug/ml [Nd] Neodymium, 10 ug/ml [Pr] Praseodymium, 10 ug/ml [Sm] Samarium, 10 ug/ml [Sc] Scandium, 10 ug/ml [Tb] Terbium, 10 ug/ml [Th] Thorium, 10 ug/ml [Tm] Thulium, 10 ug/ml [U] Uranium, 10 ug/ml [Yb] Ytterbium, 10 ug/ml [Y] Yttrium in %5 HNO3	5% HNO3	250 ml
ICP250.M28012	10 mg/l [Sb] Antimony, 10 mg/l [Ge] Germanium, 10 mg/l [Hf] Hafnium, 10 mg/l [Mo] Molybdenum, 10 mg/l [Nb] Niobium, 10 mg/l [Si] Silicon, 10 mg/l [Ta] Tantalum, 10 mg/l [Te] Tellurium, 10 mg/l [Sn] Tin, 10 mg/l [Ti] Titanium, 10 mg/l [W] Tungsten, 10 mg/l [Zr] Zirconium in %5 HNO3 tr HF	5% HNO3/Tr HF	250 ml
ICP250.M28013	100 mg/l [Cd] Cadmium, 100 mg/l [Cr] Chromium, 100 mg/l [Co] Cobalt, 100 mg/l [Cu] Copper, 100 mg/l [Fe] Iron, 100 mg/l [Pb] Lead, 100 mg/l [Mn] Manganese, 100 mg/l [Hg] Mercury, 100 mg/l [Ni] Nickel, 100 mg/l [Ag] Silver, 100 mg/l [Tl] Thallium, 100 mg/l [V] Vanadium, 100 mg/l [Zn] Zinc in %10 HNO3	10% HNO3	250 ml
ICP250.M28001	Be: 10, Co: 10, In: 10, Pb: 10, Mg: 10 (mg/l) in %3 HNO3	3% HNO3	250 ml
ICP250.M28010	10 mg/l [Ba] Barium, 10 mg/l [Be] Beryllium, 10 mg/l [Ce] Cerium, 10 mg/l [Co] Cobalt, 10 mg/l [In] Indium, 10 mg/l [Pb] Lead, 10 mg/l [Mg] Magnesium, 10 mg/l [Tl] Thallium, 10 mg/l [Th] Thorium in %2 HNO3	2% HNO3	250 ml
ICP250.M28016	100 mg/l [Al] Aluminium, 100 mg/l [As] Arsenic, 100 mg/l [Ba] Barium, 100 mg/l [Be] Beryllium, 100 mg/l [Bi] Bismuth, 100 mg/l [B] Boron, 100 mg/l [Cd] Cadmium, 100 mg/l [Ca] Calcium, 100 mg/l [Cr] Chromium, 100 mg/l [Co] Cobalt, 100 mg/l [Cu] Copper, 100 mg/l [Fe] Iron, 100 mg/l [Pb] Lead, 100 mg/l [Li] Lithium, 100 mg/l [Mg] Magnesium, 100 mg/l [Mn] Manganese, 100 mg/l [Mo] Molybdenum, 100 mg/l [Ni] Nickel, 100 mg/l [K] Potassium, 100 mg/l [Se] Selenium, 100mg/l [Na] Sodium, 100 mg/l [Sr] Strontium, 100 mg/l [Tl] Thallium, 100 mg/l [Ti] Titanium, 100 mg/l [V] Vanadium, 100 mg/l [Zn] Zinc, 100 mg/l [Si] Silicon in %5 HNO3	%5 HNO3	250 ml
ICP125.M28016	100 mg/l [Al] Aluminium, 100 mg/l [As] Arsenic, 100 mg/l [Ba] Barium, 100 mg/l [Be] Beryllium, 100 mg/l [Bi] Bismuth, 100 mg/l [B] Boron, 100 mg/l [Cd] Cadmium, 100 mg/l [Ca] Calcium, 100 mg/l [Cr] Chromium, 100 mg/l [Co] Cobalt, 100 mg/l [Cu] Copper, 100 mg/l [Fe] Iron, 100 mg/l [Pb] Lead, 100 mg/l [Li] Lithium, 100 mg/l [Mg] Magnesium, 100 mg/l [Mn] Manganese, 100 mg/l [Mo] Molybdenum, 100 mg/l [Ni] Nickel, 100 mg/l [K] Potassium, 100 mg/l [Se] Selenium, 100mg/l [Na] Sodium, 100 mg/l [Sr] Strontium, 100 mg/l [Tl] Thallium, 100 mg/l [Ti] Titanium, 100 mg/l [V] Vanadium, 100 mg/l [Zn] Zinc, 100 mg/l [Si] Silicon in %5 HNO3	%5 HNO3	100 ml
ICP250.M28017	100 mg/l [P] Phosphorus, 5 mg/l [Ag] Silver, 20 mg/l [Sb] Antimony, 20 mg/l [As] Arsenic, 20 mg/l [Ba] Barium, 20 mg/l [Be] Beryllium, 20 mg/l [Cd] Cadmium, 20 mg/l [Cr] Chromium, 20 mg/l [Co] Cobalt, 20 mg/l [Cu] Copper, 20 mg/l [Pb] Lead, 20 mg/l [Mn] Manganese, 20 mg/l [Ni] Nickel, 20 mg/l [Se] Selenium, 20 mg/l [Zn] Zinc, 20 mg/l [V] Vanadium, 20 mg/l [Tl] Thallium, 20 mg/l [Fe] Iron	%5 HNO3 + tr HF	250 ml



ICP Reference Standards			
Product No	Explanation	Matrix	Volume
ICP125.M28017	100 mg/l [P] Phosphorus, 5 mg/l [Ag] Silver, 20 mg/l [Sb] Antimony, 20 mg/l [As] Arsenic, 20 mg/l [Ba] Barium, 20 mg/l [Be] Beryllium, 20 mg/l [Cd] Cadmium, 20mg/l [Cr] Chromium, 20 mg/l [Co] Cobalt, 20 mg/l [Cu] Copper, 20 mg/l [Pb] Lead, 20 mg/l [Mn] Manganese, 20 mg/l [Ni] Nickel, 20 mg/l [Se] Selenium, 20 mg/l [Zn] Zinc, 20 mg/l [V] Vanadium, 20 mg/l [Tl] Thallium, 20 mg/l [Fe] Iron in %5 HNO3 + tr HF	%5 HNO3 + tr HF	100 ml
ICP125.M28000	ICP-MS 8 element standard - mg/l Bi: 100, Ge: 100, In: 100, Li-6: 100, Lu: 100, Rh: 100, Sc: 100, Tb:100 in 10% HNO3	%10 HNO3	100 ml
ICP500.M28020	ICP-MS tuning solution B ICAP - ug/l Ba: 1, Bi: 1, Ce: 1, Co: 1, In: 1, Li: 1, U: 1 in HNO3 2% + HCl 0.5%	%2 HNO3 + %0.5 HCl	500 ml
ICP125.M28021	100 mg/l each of Ag ; Al ; B ; Ba ; Bi ; Ca ; Cd ; Co ; Cr ; Cu ; Fe ; Ga ; In ; K ; Li ; Mg ; Mn ; Na ; Ni ; Pb ; Sr ; Tl ; Zn in 2% HNO3	%2 HNO3	100 ml
ICP125.M28018	ICP-MS Equivalent to Agilent 28 elements standard - mg/l Ag: 10, Al: 10, As: 10, Ba: 10, Be: 10, Ca: 10, Cd: 10, Co: 10, Cr: 10, Cs: 10, Cu: 10, Fe: 10, Ga: 10, Hg:10, K: 10, Li: 10, Mg: 10, Mn: 10, Na: 10, Ni: 10, Pb: 10, Rb: 10, Se: 10, Sr: 10, Tl: 10, U: 10, V: 10, Zn: 10 in 5% HNO3 ( Hg is offered in a seperated 100 ml bottle)	5% HNO3	100 ml
ICP125.M28022	100 mg/l each of Al ; Sb ; As ; Ba ; Be ; B ; Cd ; Ca ; Cr ; Co ; Cu ; Fe ; Pb ; Mg ; Mn ; Mo ; Ni ; K ; Se ; Si ; Ag ; Sr ; Na ; Tl ; Ti ; V ; Zn in HNO3 5% + Tr HF	5% HNO3 / Tr HF	100 ml
ICP500.M28023	ICP-OES Wavelength calibration solution Equivalent to Agilent 15 components; Al 5ug/ml ; As 5ug/ml ; Ba 5ug/ml ; Cd 5ug/ml ; Co 5ug/ml ; Cr 5ug/ml ; Cu 5ug/ml ; Mn 5ug/ml ; Mo 5ug/ml ; Ni 5ug/ml ; Pb 5ug/ml ; Se 5ug/ml ; Sr 5ug/ml ; Zn 5ug/ml ; K 50ug/ml in HNO3 5%	5% HNO3	500 ml
ICP125.M28024	ICP-MS Calibration Standard EPA 200.7 - mg/l Al: 200, As: 200, Ba: 200, Be: 200, B: 200, Cd: 200, Ca: 200, Ce: 200, Cr: 200, Co: 200, Cu: 200, Fe: 200, Pb: 200, Li: 200, Mg: 200, Mn: 200, Hg: 200, Ni: 200, P: 1000, K: 1000, Se: 200, Ag: 25, Tl: 200, V: 200, Zn: 200 in HNO3 5%	5% HNO3	100 ml
ICP250.M28024	ICP-MS Calibration Standard EPA 200.7 - mg/l Al: 200, As: 200, Ba: 200, Be: 200, B: 200, Cd: 200, Ca: 200, Ce: 200, Cr: 200, Co: 200, Cu: 200, Fe: 200, Pb: 200, Li: 200, Mg: 200, Mn: 200, Hg: 200, Ni: 200, P: 1000, K: 1000, Se: 200, Ag: 25, Tl: 200, V: 200, Zn: 200 in HNO3 5%	5% HNO3	250 ml
ICP125.SR100.2NA	ICP-MS 100 mg/L Strontium standard in %2 HNO3	%2 HNO3	100 ml
ICP125.V100.2NA	ICP-MS 100 mg/L Vanadium standard in %2 HNO3	%2 HNO3	100 ml
ICP250.SR1000.2NA	ICP-MS 1000 mg/L Strontium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.SR1000.2NA	ICP-MS 1000 mg/L Strontium Standard in %2 HNO3	%2 HNO3	500 ml
ICP250.V1000.2NA	ICP-MS 1000 mg/L Vanadium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.V1000.2NA	ICP-MS 1000 mg/L Vanadium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.NA100.01NA	ICP-MS 100 mg/L Sodium Standard in %0.1 HNO3	%0.1 HNO3	100 ml
ICP250.NA1000.01NA	ICP-MS 1000 mg/L Sodium Standard in %0.1 HNO3	%0.1 HNO3	250 ml
ICP500.NA1000.01NA	ICP-MS 1000 mg/L Sodium Standard in %0.1 HNO3	%0.1 HNO3	500 ml
ICP125.AG100.5NA	ICP-MS 100 mg/L Silver Standard in %5 HNO3	%5 HNO3	100 ml
ICP250.AG1000.5NA	ICP-MS 1000 mg/L Silver Standard in %5 HNO3	%5 HNO3	250 ml
ICP500.AG1000.5NA	ICP-MS 1000 mg/L Silver Standard in %5 HNO3	%5 HNO3	500 ml
ICP125.K100.01NA	ICP-MS 100 mg/L Potassium Standard in %0.1 HNO3	%0.1 HNO3	100 ml
ICP250.K1000.01NA	ICP-MS 1000 mg/L Potassium Standard in %0.1 HNO3	%0.1 HNO3	250 ml
ICP500.K1000.01NA	ICP-MS 1000 mg/L Potassium Standard in %0.1 HNO3	%0.1 HNO3	500 ml
ICP125.Y100.2NA	ICP-MS 100 mg/L Yttrium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.Y1000.2NA	ICP-MS 1000 mg/L Yttrium standard in %2 HNO3	%2 HNO3	250 ml

ICP Single Reference Standards			
Product No	Explanation	Matrix	Volume
ICP500.Y1000.2NA	ICP-MS 1000 mg/L Yttrium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.MG100.2NA	ICP-MS 100 mg/L Magnesium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.MG1000.2NA	ICP-MS 1000 mg/L Magnesium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.MG1000.2NA	ICP-MS 1000 mg/L Magnesium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.LI100.01NA	ICP-MS 100 mg/L Lithium Standard in %0.1 HNO3	%0.1 HNO3	100 ml
ICP250.LI1000.01NA	ICP-MS 1000 mg/L Lithium Standard in %0.1 HNO3	%0.1 HNO3	250 ml
ICP500.LI1000.01NA	ICP-MS 1000 mg/L Lithium Standard in %0.1 HNO3	%0.1 HNO3	500 ml
ICP125.CE100.3NA	ICP-MS 100 mg/L Cerium Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.CE1000.3NA	ICP-MS 1000 mg/L Cerium Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.CE1000.3NA	ICP-MS 1000 mg/L Cerium Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.NI100.2NA	ICP-MS 100 mg/L Nickel Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.NI1000.2NA	ICP-MS 1000 mg/L Nickel Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.NI1000.2NA	ICP-MS 1000 mg/L Nickel Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.HG100.2CA	ICP-MS 100 mg/L Mercury Standard in %2 HCl	%2 HCl	100 ml
ICP250.HG1000.2CA	ICP-MS 1000 mg/L Mercury Standard in %2 HCl	%2 HCl	250 ml
ICP500.HG1000.2CA	ICP-MS 1000 mg/L Mercury Standard in %2 HCl	%2 HCl	500 ml
ICP125.HG100.10NA	ICP-MS 100 mg/L Mercury Standard in %10 HNO3	%10 HNO3	100 ml
ICP250.HG1000.10NA	ICP-MS 1000 mg/L Mercury Standard in %10 HNO3	%10 HNO3	250 ml
ICP500.HG1000.10NA	ICP-MS 1000 mg/L Mercury Standard in %10 HNO3	%10 HNO3	500 ml
ICP125.PB100.05NA	ICP-MS 100 mg/L Lead in %0.5 HNO3	%0.5 HNO3	100 ml
ICP250.PB1000.05NA	ICP-MS 1000 mg/L Lead Standard in %0.5 HNO3	%0.5 HNO3	250 ml
ICP500.PB1000.05NA	ICP-MS 1000 mg/L Lead Standard in %0.5 HNO3	%0.5 HNO3	500 ml
ICP125.FE100.3NA	ICP-MS 100 mg/L Iron Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.FE1000.3NA	ICP-MS 1000 mg/L Iron Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.FE1000.3NA	ICP-MS 1000 mg/L Iron Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.CO100.2NA	ICP-MS 100 mg/L Cobalt Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.CO1000.2NA	ICP-MS 1000 mg/L Cobalt Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.CO1000.2NA	ICP-MS 1000 mg/L Cobalt Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.CR6100.2NA	ICP-MS 100 mg/L Chromium (VI) Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.CR61000.2NA	ICP-MS 1000 mg/L Chromium (VI) Standard in %2 HNO3	%2 HNO3	100 ml

ICP Single Reference Standards			
Product No	Explanation	Matrix	Volume
ICP250.CR61000.2NA	ICP-MS 1000 mg/L Chromium (VI) Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.CR61000.2NA	ICP-MS 1000 mg/L Chromium (VI) Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.CR31000.3NA	ICP-MS 1000 mg/L Chromium (III) Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.CR31000.3NA	ICP-MS 1000 mg/L Chromium (III) Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.CR31000.2NA	ICP-MS 1000 mg/L Chromium (III) Standard in %5 HNO3	%5 HNO3	500 ml
ICP125.CD100.3NA	ICP-MS 100 mg/L Cadmium in %3 HNO3	%3 HNO3	100 ml
ICP250.CD1000.3NA	ICP-MS 1000 mg/L Cadmium Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.CD1000.3NA	ICP-MS 1000 mg/L Cadmium Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.B100.W	ICP-MS 100 mg/L Boron Standard in Water	Water	100 ml
ICP250.B1000.W	ICP-MS 1000 mg/L Boron Standard in Water	Water	250 ml
ICP500.B1000.W	ICP-MS 1000 mg/L Boron Standard in Water	Water	500 ml
ICP125.AS3100.2CA	ICP-MS 100 mg/L Arsenic(III) Standard in %2 HCl	%2 HCl	100 ml
ICP125.AS31000.2CA	ICP-MS 1000 mg/L Arsenic(III) Standard in %2 HCl	%2 HCl	100 ml
ICP250.AS31000.2CA	ICP-MS 1000 mg/L Arsenic(III) Standard in %2 HCl	%2 HCl	250 ml
ICP500.AS31000.2CA	ICP-MS 1000 mg/L Arsenic(III) Standard in %2 HCl	%2 HCl	500 ml
ICP125.AL100.1NA	ICP-MS 100 mg/L Aluminium Standard in %1 HNO3	%1 HNO3	100 ml
ICP250.AL1000.1NA	ICP-MS 1000 mg/L Aluminum Standard in %1 HNO3	%1 HNO3	250 ml
ICP500.AL1000.1NA	ICP-MS 1000 mg/L Aluminum Standard in %1 HNO3	%1 HNO3	500 ml
ICP125.TB100.3NA	ICP-MS 100 mg/L Terbium Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.TB1000.3NA	ICP-MS 1000 mg/L Terbium Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.TB1000.3NA	ICP-MS 1000 mg/L Terbium Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.SC100.2NA	ICP-MS 100 mg/L Scandium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.SC1000.2NA	ICP-MS 1000 mg/L Scandium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.RH100.3NA	ICP-MS 100 mg/L Rhodium Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.RH1000.3NA	ICP-MS 1000 mg/L Rhodium Standard in %3 HNO3	%3 HNO3	250 ml
ICP125.LU100.3NA	ICP-MS 100 mg/L Lutetium Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.LU1000.3NA	ICP-MS 1000 mg/L Lutetium Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.LU1000.3NA	ICP-MS 1000 mg/L Lutetium Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.GE100.1NA	ICP-MS 100 mg/L Germanium Standard in %1 HNO3	%1 HNO3	100 ml
ICP125.GE1000.1NA	ICP-MS 1000 mg/L Germanium standard in %1 HNO3	%1 HNO3	100 ml

ICP Single Reference Standards			
Product No	Explanation	Matrix	Volume
ICP250.GE1000.1NA	ICP-MS 1000 mg/L Germanium standard in %1 HNO3	%1 HNO3	250 ml
ICP125.MN100.3NA	ICP-MS 100 mg/L Manganese Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.MN1000.3NA	ICP-MS 1000 mg/L Manganese Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.MN1000.3NA	ICP-MS 1000 mg/L Manganese Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.SE100.2NA	ICP-MS 100 mg/L Selenium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.SE1000.2NA	ICP-MS 1000 mg/L Selenium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.SE1000.2NA	ICP-MS 1000 mg/L Selenium Standard in %2HNO3	%2HNO3	500 ml
ICP125.BE100.3NA	ICP-MS 100 mg/L Beryllium Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.BE1000.3NA	ICP-MS 1000 mg/L Beryllium Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.BE1000.3NA	ICP-MS 1000 mg/L Beryllium Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.SI100.3NA	ICP-MS 100mg/L Silicon Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.SI1000.3NA	ICP-MS 1000 mg/L Silicon Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.SI1000.3NA	ICP-MS 1000 mg/L Silicon Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.TI100.3NA	ICP-MS 100mg/L Titanium Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.TI1000.3NA	ICP-MS 1000 mg/L Titanium Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.TI1000.3NA	ICP-MS 1000 mg/L Titanium Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.BA100.2NA	ICP-MS 100 mg/L Barium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.BA1000.2NA	ICP-MS 1000 mg/L Barium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.BA1000.2NA	ICP-MS 1000 mg/L Barium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.ZN100.2NA	ICP-MS 100mg/L Zinc Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.ZN1000.2NA	ICP-MS 1000 mg/L Zinc Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.ZN1000.2NA	ICP-MS 1000 mg/L Zinc Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.CU100.2NA	ICP-MS 100mg/L Copper Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.CU1000.2NA	ICP-MS 1000 mg/L Copper Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.CU1000.2NA	ICP-MS 1000 mg/L Copper Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.TH100.2NA	ICP-MS 100mg/L Thallium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.TH1000.2NA	ICP-MS 1000 mg/L Thallium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.TH1000.2NA	ICP-MS 1000 mg/L Thallium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.IN100.3NA	ICP-MS 100mg/L Indium Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.IN1000.3NA	ICP-MS 1000 mg/L Indium Standard in %3 HNO3	%3 HNO3	250 ml

ICP Single Reference Standards			
Product No	Explanation	Matrix	Volume
ICP500.IN1000.3NA	ICP-MS 1000 mg/L Indium Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.CA100.2NA	ICP-MS 100mg/L Calcium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.CA1000.2NA	ICP-MS 1000 mg/L Calcium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.CA1000.2NA	ICP-MS 1000 mg/L Calcium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.BI100.3NA	ICP-MS 100 mg/L Bismuth Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.BI1000.3NA	ICP-MS 1000 mg/L Bismuth Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.BI1000.3NA	ICP-MS 1000 mg/L Bismuth Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.CS100.2NA	ICP-MS 100 mg/L Cesium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.CS1000.2NA	ICP-MS 1000 mg/L Cesium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.CS1000.2NA	ICP-MS 1000 mg/L Cesium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.AU100.2CA	ICP-MS 100 mg/L Gold Standard in %2 HCl	%2 HCl	100 ml
ICP250.AU1000.2CA	ICP-MS 1000 mg/L Gold Standard in %2 HCl	%2 HCl	250 ml
ICP500.AU1000.2CA	ICP-MS 1000 mg/L Gold Standard in %2 HCl	%2 HCl	500 ml
ICP125.PD100.10NA	ICP-MS 100 mg/L Palladium Standard in %10 HNO3	%10 HNO3	100 ml
ICP250.PD1000.10NA	ICP-MS 1000 mg/L Palladium Standard in %10 HNO3	%10 HNO3	250 ml
ICP500.PD1000.10NA	ICP-MS 1000 mg/L Palladium Standard in %10 HNO3	%10 HNO3	500 ml
ICP125.PT100.2CA	ICP-MS 100 mg/L Platinum Standard in %2 HCl	%2 HCl	100 ml
ICP250.PT1000.2CA	ICP-MS 1000 mg/L Platinum Standard in %2 HCl	%2 HCl	250 ml
ICP500.PT1000.2CA	ICP-MS 1000 mg/L Platinum Standard in %2 HCl	%2 HCl	500 ml
ICP125.RU100.2CA	ICP-MS 100 mg/L Ruthenium Standard in %2 HCl	%2 HCl	100 ml
ICP250.RU1000.2CA	ICP-MS 1000 mg/L Ruthenium Standard in %2 HCl	%2 HCl	250 ml
ICP500.RU1000.2CA	ICP-MS 1000 mg/L Ruthenium Standard in %2 HCl	%2 HCl	500 ml
ICP125.RB100.2NA	ICP-MS 100 mg/L Rubidium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.RB1000.2NA	ICP-MS 1000 mg/L Rubidium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.RB1000.2NA	ICP-MS 1000 mg/L Rubidium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.U100.2NA	ICP-MS 100 mg/L Uranium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.U1000.2NA	ICP-MS 1000 mg/L Uranium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.U1000.2NA	ICP-MS 1000 mg/L Uranium Standard	Water	500 ml
ICP125.DY100.2NA	ICP-MS 100 mg/L Dysprosium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.DY1000.2NA	ICP-MS 1000 mg/L Dysprosium Standard in %2 HNO3	%2 HNO3	250 ml

ICP Single Reference Standards			
Product No	Explanation	Matrix	Volume
ICP500.DY1000.2NA	ICP-MS 1000 mg/L Dysprosium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.ER100.2NA	ICP-MS 100 mg/L Erbium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.ER1000.2NA	ICP-MS 1000 mg/L Erbium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.ER1000.2NA	ICP-MS 1000 mg/L Erbium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.EU100.2NA	ICP-MS 100 mg/L Europium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.EU1000.2NA	ICP-MS 1000 mg/L Europium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.EU1000.2NA	ICP-MS 1000 mg/L Europium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.LA100.2NA	ICP-MS 100 mg/L Lanthanum Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.LA1000.2NA	ICP-MS 1000 mg/L Lanthanum Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.LA1000.2NA	ICP-MS 1000 mg/L Lanthanum Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.PR100.2NA	ICP-MS 100 mg/L Praseodymium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.PR1000.2NA	ICP-MS 1000 mg/L Praseodymium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.PR1000.2NA	ICP-MS 1000 mg/L Praseodymium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.GD100.2NA	ICP-MS 100 mg/L Gadolinium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.GD1000.2NA	ICP-MS 1000 mg/L Gadolinium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.GD1000.2NA	ICP-MS 1000 mg/L Gadolinium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.HO100.2NA	ICP-MS 100 mg/L Holmium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.HO1000.2NA	ICP-MS 1000 mg/L Holmium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.HO1000.2NA	ICP-MS 1000 mg/L Holmium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.TM100.2NA	ICP-MS 100 mg/L Thulium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.TM1000.2NA	ICP-MS 1000 mg/L Thulium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.TM1000.2NA	ICP-MS 1000 mg/L Thulium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.YB100.2NA	ICP-MS 100 mg/L Ytterbium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.YB1000.2NA	ICP-MS 1000 mg/L Ytterbium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.YB1000.2NA	ICP-MS 1000 mg/L Ytterbium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.IR100.2CA	ICP-MS 100 mg/L Iridium Standard in %2 HCl	%2 HCl	100 ml
ICP250.IR1000.2CA	ICP-MS 1000 mg/L Iridium Standard in %2 HCl	%2 HCl	250 ml
ICP500.IR1000.2CA	ICP-MS 1000 mg/L Iridium Standard in %2 HCl	%2 HCl	500 ml
ICP125.GA100.2NA	ICP-MS 100 mg/L Gallium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.GA1000.2NA	ICP-MS 1000 mg/L Gallium Standard	%2 HNO3	250 ml

ICP Single Reference Standards			
Product No	Explanation	Matrix	Volume
ICP500.GA1000.2NA	ICP-MS 1000 mg/L Gallium Standard in %2 HNO3	%2 HNO3	500 ml
ICP250.RE1000.2NA	ICP-MS 1000 mg/L Rhenium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.RE1000.2NA	ICP-MS 1000 mg/L Rhenium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.HF100.2NA05HF	ICP-MS 100 mg/L Hafnium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	100 ml
ICP250.HF1000.2NA05HF	ICP-MS 1000 mg/L Hafnium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	250 ml
ICP500.HF1000.2NA05HF	ICP-MS 1000 mg/L Hafnium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	500 ml
ICP125.SN100.1NA05HF	ICP-MS 100 mg/L Tin Standard in %1 HNO3 + %0.5 HF	%1 HNO3 + Tr HF	100 ml
ICP250.SN1000.1NA05HF	ICP-MS 1000 mg/L Tin Standard in %1 HNO3 + %0.5 HF	%1 HNO3 + Tr HF	250 ml
ICP500.SN1000.1NA05HF	ICP-MS 1000 mg/L Tin Standard in %1 HNO3 + %0.5 HF	%1 HNO3 + Tr HF	500 ml
ICP125.NB100.2NA05HF	ICP-MS 100 mg/L Niobium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	100 ml
ICP250.NB1000.2NA05HF	ICP-MS 1000 mg/L Niobium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	250 ml
ICP500.NB1000.2NA05HF	ICP-MS 1000 mg/L Niobium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	500 ml
ICP125.TA100.2NA05HF	ICP-MS 100 mg/L Tantalum Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	100 ml
ICP250.TA1000.2NA05HF	ICP-MS 1000 mg/L Tantalum Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	250 ml
ICP500.TA1000.2NA05HF	ICP-MS 1000 mg/L Tantalum Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	500 ml
ICP125.ZR100.2NA05HF	ICP-MS 100 mg/L Zirconium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	100 ml
ICP250.ZR1000.2NA05HF	ICP-MS 1000 mg/L Zirconium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	250 ml
ICP500.ZR1000.2NA05HF	ICP-MS 1000 mg/L Zirconium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	500 ml
ICP125.SB100.5NA1HF	ICP-MS 100 mg/L Antimony Standard in %5 HNO3 + %1 HF	%5 HNO3 + Tr HF	100 ml
ICP250.SB1000.5NA1HF	ICP-MS 1000 mg/L Antimony Standard in %5 HNO3 + %1 HF	%5 HNO3 + Tr HF	250 ml
ICP500.SB1000.5NA1HF	ICP-MS 1000 mg/L Antimony Standard in %5 HNO3 + %1 HF	%5 HNO3 + Tr HF	500 ml
ICP125.TE100.2NA	ICP-MS 100 mg/L Tellurium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.TE1000.2NA	ICP-MS 1000 mg/L Tellurium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.TE1000.2NA	ICP-MS 1000 mg/L Tellurium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.TH100.2NA	ICP-MS 100 mg/L Thorium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.TH1000.2NA	ICP-MS 1000 mg/L Thorium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.TH1000.2NA	ICP-MS 1000 mg/L Thorium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.SM100.2NA	ICP-MS 100 mg/L Samarium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.SM1000.2NA	ICP-MS 1000 mg/L Samarium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.SM1000.2NA	ICP-MS 1000 mg/L Samarium Standard in %2 HNO3	%2 HNO3	500 ml

ICP Single Reference Standards			
Product No	Explanation	Matrix	Volume
ICP125.ND100.2NA	ICP-MS 100 mg/L Neodymium Standard in %2 HNO3	%2 HNO3	100 ml
ICP250.ND1000.2NA	ICP-MS 1000 mg/L Neodymium Standard in %2 HNO3	%2 HNO3	250 ml
ICP500.ND1000.2NA	ICP-MS1000 mg/L Neodymium Standard in %2 HNO3	%2 HNO3	500 ml
ICP125.MO100.3NA	ICP-MS 100 mg/L Molybdenum Standard in %3 HNO3	%3 HNO3	100 ml
ICP250.MO1000.3NA	ICP-MS 1000 mg/L Molybdenum Standard in %3 HNO3	%3 HNO3	250 ml
ICP500.MO1000.3NA	ICP-MS 1000 mg/L Molybdenum Standard in %3 HNO3	%3 HNO3	500 ml
ICP125.P100.W	ICP-MS 100 mg/L Phosphorus Standard in Water	Water	100 ml
ICP250.P1000.W	ICP-MS 1000 mg/L Phosphorus Standard in Water	Water	250 ml
ICP500.P1000.W	ICP-MS 1000 mg/L Phosphorus Standard in Water	Water	500 ml
ICP125.S100.W	ICP-MS 100 mg/L Sulphur Standard in Water	Water	100 ml
ICP250.S1000.W	ICP-MS 1000 mg/L Sulphur Standard in Water	Water	250 ml
ICP500.S1000.W	ICP-MS 1000 mg/L Sulphur Standard in Water	Water	500 ml
ICP125.AG1000.5NA	ICP-MS 1000 mg/L Silver Standard in %5 HNO3	%5 HNO3	100 ml
ICP125.AL1000.1NA	ICP-MS 1000 mg/L Aluminium Standard in %1 HNO3	%1 HNO3	100 ml
ICP125.AS1000.2CA	ICP-MS 1000 mg/L Arsenic Standard in %2 HCl	%2 HCl	100 ml
ICP125.AU1000.2CA	ICP-MS 1000 mg/L Gold Standard in %2 HCl	%2 HCl	100 ml
ICP125.B1000.W	ICP-MS 1000 mg/L Boron Standard in Water	Water	100 ml
ICP125.BA1000.2NA	ICP-MS 1000 mg/L Barium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.BE1000.3NA	ICP-MS 1000 mg/L Beryllium Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.BI1000.3NA	ICP-MS 1000 mg/L Bismuth Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.CA1000.2NA	ICP-MS 1000 mg/L Calcium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.CD1000.3NA	ICP-MS 1000 mg/L Cadmium Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.CE1000.3NA	ICP-MS 1000 mg/L Cerium Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.CO1000.2NA	ICP-MS 1000 mg/L Cobalt Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.CS1000.2NA	ICP-MS 1000 mg/L Cesium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.CU1000.2NA	ICP-MS 1000 mg/L Copper Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.DY1000.2NA	ICP-MS 1000 mg/L Dysprosium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.EU1000.2NA	ICP-MS 1000 mg/L Europium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.FE1000.3NA	ICP-MS 1000 mg/L Iron Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.GA1000.2NA	ICP-MS 1000 mg/L Gallium Standard in %2 HNO3	%2 HNO3	100 ml



ICP Single Reference Standards			
Product No	Explanation	Matrix	Volume
ICP125.GD1000.2NA	ICP-MS 1000 mg/L Gadolinium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.GE10.1NA	ICP-MS 10 mg/L Germanium Standard in %1 HNO3	%1 HNO3	100 ml
ICP125.HF1000.2NA01HF	ICP-MS 1000 mg/L Hafnium Standard in %2 HNO3 + % 0.1 HF	%2 HNO3 + Tr HF	100 ml
ICP125.HG1000.2CA	ICP-MS 1000 mg/L Mercury Standard in %2 HCl	%2 HCl	100 ml
ICP125.HG1000.10NA	ICP-MS 1000 mg/L Mercury Standard in %10 HNO3	%10 HNO3	100 ml
ICP125.HO1000.2NA	ICP-MS 1000 mg/L Holmium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.IN1000.3NA	ICP-MS 1000 mg/L Indium Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.IR1000.2CA	ICP-MS 1000 mg/L Iridium Standard in %2 HCl	%2 HCl	100 ml
ICP125.K1000.01NA	ICP-MS 1000 mg/L Potassium Standard in %0.1 HNO3	%0.1 HNO3	100 ml
ICP125.LA1000.2NA	ICP-MS 1000 mg/L Lanthanum Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.LI1000.01NA	ICP-MS 1000 mg/L Lithium Standard in %0.1 HNO3	%0.1 HNO3	100 ml
ICP125.LU1000.3NA	ICP-MS 1000 mg/L Lutetium Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.MG1000.2NA	ICP-MS 1000 mg/L Magnesium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.MN1000.3NA	ICP-MS 1000 mg/L Manganese Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.MO1000.3NA	ICP-MS 1000 mg/L Molybdenum Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.NA1000.01NA	ICP-MS 1000 mg/L Sodium Standard in %0.1 HNO3	%0.1 HNO3	100 ml
ICP125.NB1000.2NA05HF	ICP-MS 1000 mg/L Niobium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	100 ml
ICP125.ND1000.2NA	ICP-MS 1000 mg/L Neodymium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.NI1000.2NA	ICP-MS 1000 mg/L Nickel Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.P1000.W	ICP-MS 1000 mg/L Phosphorus Standard in Water	Water	100 ml
ICP125.PB1000.05NA	ICP-MS 1000 mg/L Lead Standard in %0.5 HNO3	%0.5 HNO3	100 ml
ICP125.PD1000.10NA	ICP-MS 1000 mg/L Palladium Standard in %10 HNO3	%10 HNO3	100 ml
ICP125.PR1000.2NA	ICP-MS 1000 mg/L Praseodymium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.PT1000.2CA	ICP-MS 1000 mg/L Platinum Standard in %2 HCl	%2 HCl	100 ml
ICP125.RB1000.2NA	ICP-MS 1000 mg/L Rubidium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.RE1000.2NA	ICP-MS 1000 mg/L Rhenium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.RH10.3NA	ICP-MS 10 mg/L Rhodium Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.RU1000.2CA	ICP-MS 1000 mg/L Ruthenium Standard in %2 HCl	%2 HCl	100 ml
ICP125.S1000.W	ICP-MS 1000 mg/L Sulphur Standard in Water	Water	100 ml
ICP125.SB1000.5NA1HF	ICP-MS 1000 mg/L Antimony Standard in %5 HNO3 + %1 HF	%5 HNO3 + Tr HF	100 ml

ICP Single Reference Standards			
Product No	Explanation	Matrix	Volume
ICP125.SC10.2NA	ICP-MS 10 mg/L Scandium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.SE1000.2NA	ICP-MS 1000 mg/L Selenium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.SI1000.3NA	ICP-MS 1000 mg/L Silicon Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.SM1000.2NA	ICP-MS 1000 mg/L Samarium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.SN1000.1NA05HF	ICP-MS 1000 mg/L Tin Standard in %1 HNO3 + %0.5 HF	%1 HNO3 + Tr HF	100 ml
ICP125.SR1000.2NA	ICP-MS 1000 mg/L Strontium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.TA1000.2NA05HF	ICP-MS 1000 mg/L Tantalum Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	100 ml
ICP30.TA1000.2NA05HF	ICP-MS 1000 mg/L Tantalum Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	30 ml
ICP125.TB1000.3NA	ICP-MS 1000 mg/L Terbium Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.TE1000.2NA	ICP-MS 1000 mg/L Tellurium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.TH1000.2NA	ICP-MS 1000 mg/L Thorium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.TI1000.3NA	ICP-MS 1000 mg/L Titanium Standard in %3 HNO3	%3 HNO3	100 ml
ICP125.TI1000.2NA	ICP-MS 1000 mg/L Thallium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.TM1000.2NA	ICP-MS 1000 mg/L Thulium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.U1000.2NA	ICP-MS 1000 mg/L Uranium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.V1000.2NA	ICP-MS 1000 mg/L Vanadium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.Y1000.2NA	ICP-MS 1000 mg/L Yttrium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.YB1000.2NA	ICP-MS 1000 mg/L Ytterbium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.ZN1000.2NA	ICP-MS 1000 mg/L Zinc Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.ZR1000.2NA05HF	ICP-MS 1000 mg/L Zirconium Standard in %2 HNO3 + %0.5 HF	%2 HNO3 + Tr HF	100 ml
ICP125.ER1000.2NA	ICP-MS 1000 mg/L Erbium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.W100.1NA2HF	ICP-MS 100 mg/L Tungsten Standard in %1 HNO3 + %2 HF	%1 HNO3 + %2 HF	100 ml
ICP125.W1000.1NA2HF	ICP-MS 100 mg/L Tungsten Standard in %1 HNO3 + %2 HF	%1 HNO3 + %2 HF	100 ml
ICP125.CR1000.2NA	ICP-MS 1000 mg/L Chromium Standard in %2 HNO3	%2 HNO3	100 ml
ICP125.C1000.W	ICP 1000 mg/l Carbon Standard in Water	Water	100 ml
ICP250.C1000.W	ICP 1000 mg/l Carbon Standard in Water	Water	250 ml

# ION CHROMATOGRAPHY REFERENCE STANDARD SOLUTIONS



## Ion Chromatography Mixture Reference Standards

Product No	Explanation	Matrix	Volume
IC250.Set1	IC anion set for 7 point calibration curve. Calibration set contains 250 ml x 7 bottles. 1-) 250 ml / F - 0,25 mg/l; PO4 - 0,3 mg/L; NO3 - 5 mg/L; Cl - 10 mg/L; SO4 - 10 mg/L 2-) 250 ml / F - 0,5 mg/l; PO4 - 0,5 mg/L; NO3 - 10 mg/L; Cl - 20 mg/L; SO4 - 20 mg/L 3-) 250 ml / F - 0,75 mg/l; PO4 - 0,75 mg/L; NO3 - 20 mg/L; Cl - 30 mg/L; SO4 - 30 mg/L 4-) 250 ml / F - 1 mg/l; PO4 - 1 mg/L; NO3 - 25 mg/L; Cl - 40 mg/L; SO4 - 40 mg/L 5-) 250 ml / F - 1,25 mg/l; PO4 - 1,5 mg/L; NO3 - 35 mg/L; Cl - 50 mg/L; SO4 - 50 mg/L 6-) 250 ml / F - 1,50 mg/l; PO4 - 2,0 mg/L; NO3 - 40 mg/L; Cl - 60 mg/L; SO4 - 60 mg/L 7-) 250 ml / F - 2,0 mg/l; PO4 - 2,5 mg/L; NO3 - 45 mg/L; Cl - 70 mg/L; SO4 - 70 mg/L	Water	250 ml
IC250.Set2	IC cation set for 6 point calibration curve. Calibration set contains 250 ml x 6 bottles. 1-) 250 ml / K - 1 mg/L; Ca - 5 mg/L; Mg - 5 mg/L; Na - 5 mg/L 2-) 250 ml / K - 3 mg/L; Ca - 10 mg/L; Mg - 10 mg/L; Na - 10 mg/L 3-) 250 ml / K - 5 mg/L; Ca - 20 mg/L; Mg - 15 mg/L; Na - 20 mg/L 4-) 250 ml / K - 10 mg/L; Ca - 30 mg/L; Mg - 20 mg/L; Na - 30 mg/L 5-) 250 ml / K - 15 mg/L; Ca - 40 mg/L; Mg - 30 mg/L; Na - 40 mg/L 6-) 250 ml / K - 20 mg/L; Ca - 45 mg/L; Mg - 35 mg/L; Na - 45 mg/L	Water	250 ml
IC100.Set3	IQ/OQ/PQ Kit for the qualification of ion chromatography systems. Contains 100 ml x 6 bromide reference standards: 5; 10; 20; 50; 100; 1000 (mg/l)	Water	100 ml x 6
IC125.M18002	F: 1000, Cl: 1000, NO2: 1000, Br: 1000, NO3: 1000, SO4: 1000, PO4: 1000 (mg/l)	Water	100 ml
IC125.M18003	F: 20, Cl: 30, NO2: 100, Br: 100, NO3: 100, SO4: 150, PO4: 150 (mg/l)	Water	100 ml
IC125.M18004	NH4: 100, Ca: 100, Ba: 100, Mn: 100, Sr: 100, Li: 100, Mg: 100, K: 100, Na: 100 (mg/l)	Water	100 ml
IC125.M18005	NH4: 400, Ca: 1000, Li: 50, Mg: 200, K: 200, Na: 200 (mg/l)	Water	100 ml
IC125.M18006	F: 100, Cl: 100, NO2: 100, Br: 100, NO3: 100, SO4: 100, PO4: 100 (mg/l)	Water	100 ml
IC250.M18006	F: 100, Cl: 100, NO2: 100, Br: 100, NO3: 100, SO4: 100, PO4: 100 (mg/l)	Water	250 ml
IC500.M18002	F: 1000, Cl: 1000, NO2: 1000, Br: 1000, NO3: 1000, SO4: 1000, PO4: 1000 (mg/l)	Water	500 ml
IC500.M18003	F: 20, Cl: 30, NO2: 100, Br: 100, NO3: 100, SO4: 150, PO4: 150 (mg/l)	Water	500 ml
IC500.M18004	NH4: 100, Ca: 100, Ba: 100, Mn: 100, Sr: 100, Li: 100, Mg: 100, K: 100, Na: 100 (mg/l)	Water	500 ml
IC500.M18005	NH4: 400, Ca: 1000, Li: 50, Mg: 200, K: 200, Na: 200 (mg/l)	Water	500 ml
IC125.M18000	Ion Chromatography 7 anion standard - mg/l F: 20, Cl: 100, NO2: 100, Br: 100, NO3: 100, SO4: 100, PO4: 200 in Water	Water	100 ml
IC125.M18001	Ion Chromatography 6 cation standard - mg/l Li: 50, Na: 200, NH4: 250, K: 500, Ca: 500, Mg: 250 in Water	Water	100 ml
IC125.M18008	Ion Chromatography 5 cation standard - mg/l Na: 100, NH4: 100, K: 100, Ca: 100, Mg: 100 in Water	Water	100 ml
IC250.M18008	Ion Chromatography 5 cation standard - mg/l Na: 100, NH4: 100, K: 100, Ca: 100, Mg: 100 in Water	Water	250 ml

## Ion Chromatography Single Reference Standards

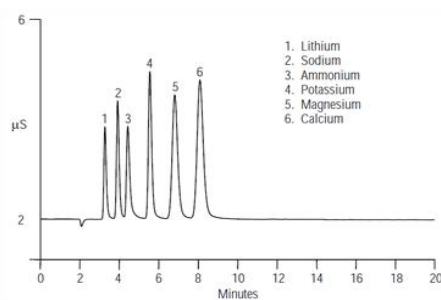
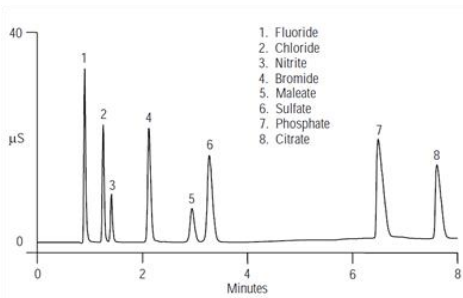
Product No	Explanation	Matrix	Volume
IC125.SO41000.W	Ion Chromatography 1000mg/L Sulfate standard in Water	Water	100 ml
IC250.SO41000.W	Ion Chromatography 1000mg/L Sulfate Standard in Water	Water	250 ml
IC500.SO41000.W	Ion Chromatography 1000mg/L Sulfate Standard in Water	Water	500 ml
IC125.SO31000.W	Ion Chromatography 1000mg/L Sulfite Standard in Water	Water	100 ml
IC250.SO31000.W	Ion Chromatography 1000mg/L Sulfite Standard in Water	Water	250 ml
IC500.SO31000.W	Ion Chromatography 1000mg/L Sulfite Standard in Water	Water	500 ml
IC125.K1000.W	Ion Chromatography 1000mg/L Potassium Standard in Water	Water	100 ml
IC250.K1000.W	Ion Chromatography 1000mg/L Potassium Standard in Water	Water	250 ml
IC500.K1000.W	Ion Chromatography 1000mg/L Potassium Standard in Water	Water	500 ml
IC125.NO31000.W	Ion Chromatography 1000mg/L Nitrate Standard in Water	Water	100 ml
IC250.NO31000.W	Ion Chromatography 1000mg/L Nitrate Standard in Water	Water	250 ml
IC500.NO31000.W	Ion Chromatography 1000mg/L Nitrate Standard in Water	Water	500 ml
IC125.NO21000.W	Ion Chromatography 1000mg/L Nitrite Standard in Water	Water	100 ml
IC250.NO21000.W	Ion Chromatography 1000mg/L Nitrite Standard in Water	Water	250 ml
IC500.NO21000.W	Ion Chromatography 1000mg/L Nitrite Standard in Water	Water	500 ml
IC125.F1000.W	Ion Chromatography 1000mg/L Fluoride Standard in Water	Water	100 ml
IC250.F1000.W	Ion Chromatography 1000mg/L Fluoride Standard in Water	Water	250 ml
IC500.F1000.W	Ion Chromatography 1000mg/L Fluoride Standard in Water	Water	500 ml
IC125.BRO31000.W	Ion Chromatography 1000mg/L Bromate Standard in Water	Water	100 ml
IC250.BRO31000.W	Ion Chromatography 1000mg/L Bromate Standard in Water	Water	250 ml
IC500.BRO31000.W	Ion Chromatography 1000mg/L Bromate Standard in Water	Water	500 ml
IC125.BR1000.W	Ion Chromatography 1000mg/L Bromide Standard in Water	Water	100 ml
IC250.BR1000.W	Ion Chromatography 1000mg/L Bromide Standard in Water	Water	250 ml
IC500.BR1000.W	Ion Chromatography 1000mg/L Bromide Standard in Water	Water	500 ml
IC125.PO41000.W	Ion Chromatography 1000mg/L Phosphate Standard in Water	Water	100 ml

## Ion Chromatography Single Reference Standards

Product No	Explanation	Matrix	Volume
IC250.PO41000.W	Ion Chromatography 1000mg/L Phosphate Standard in Water	Water	250 ml
IC500.PO41000.W	Ion Chromatography 1000mg/L Phosphate Standard in Water	Water	500 ml
IC125.P2O71000.W	Ion Chromatography 1000mg/L Pyrophosphate Standard in Water	Water	100 ml
IC500.P2O71000.W	Ion Chromatography 1000mg/L Pyrophosphate Standard in Water	Water	500 ml
IC1000.P2O71000.W	Ion Chromatography 1000mg/L Pyrophosphate Standard in Water	Water	1000 ml
IC125.C6H5O71000.W	Ion Chromatography 1000mg/L Citrate Standard in Water	Water	100 ml
IC500.C6H5O71000.W	Ion Chromatography 1000mg/L Citrate Standard in Water	Water	500 ml
IC1000.C6H5O71000.W	Ion Chromatography 1000mg/L Citrate Standard in Water	Water	1000 ml
IC125.NH41000.W	Ion Chromatography 1000mg/L Ammonium Standard in Water	Water	100 ml
IC250.NH41000.W	Ion Chromatography 1000mg/L Ammonium Standard in Water	Water	250 ml
IC500.NH41000.W	Ion Chromatography 1000mg/L Ammonium Standard in Water	Water	500 ml
IC125.LI1000.W	Ion Chromatography 1000mg/L Lithium Standard in Water	Water	100 ml
IC250.LI1000.W	Ion Chromatography 1000mg/L Lithium Standard in Water	Water	250 ml
IC500.LI1000.W	Ion Chromatography 1000mg/L Lithium Standard in Water	Water	500 ml
IC125.MG1000.W	Ion Chromatography 1000mg/L Magnesium Standard in Water	Water	100 ml
IC250.MG1000.W	Ion Chromatography 1000mg/L Magnesium Standard in Water	Water	250 ml
IC500.MG1000.W	Ion Chromatography 1000mg/L Magnesium Standard in Water	Water	500 ml
IC125.CA1000.W	Ion Chromatography 1000mg/L Calcium Standard in Water	Water	100 ml
IC250.CA1000.W	Ion Chromatography 1000mg/L Calcium Standard in Water	Water	250 ml
IC500.CA1000.W	Ion Chromatography 1000mg/L Calcium Standard in Water	Water	500 ml
IC125.CL1000.W	Ion Chromatography 1000 mg/L Chloride Standard in Water	Water	100 ml
IC250.CL1000.W	Ion Chromatography 1000 mg/L Chloride Standard in Water	Water	250 ml
IC500.CL1000.W	Ion Chromatography 1000mg/L Chloride Standard in Water	Water	500 ml
IC125.PO4P1000.W	Ion Chromatography 1000mg/L Phosphate as Phosphorus Standard in Water	Water	100 ml
IC250.PO4P1000.W	Ion Chromatography 1000mg/L Phosphate as Phosphorus Standard in Water	Water	250 ml

## Ion Chromatography Single Reference Standards

Product No	Explanation	Matrix	Volume
IC500.PO4P1000.W	Ion Chromatography 1000mg/L Phosphate as Phosphorus Standard in Water	Water	500 ml
IC125.NH4N1000.W	Ion Chromatography 1000mg/L Ammonium as N Standard in Water	Water	100 ml
IC250.NH4N1000.W	Ion Chromatography 1000mg/L Ammonium as N Standard in Water	Water	250 ml
IC500.NH4N1000.W	Ion Chromatography 1000mg/L Ammonium as N Standard in Water	Water	500 ml
IC125.NO3N1000.W	Ion Chromatography 1000mg/L Nitrate as N Standard in Water	Water	100 ml
IC250NO3N1000.W	Ion Chromatography 1000mg/L Nitrate as N Standard in Water	Water	250 ml
IC500.NO3N1000.W	Ion Chromatography 1000mg/L Nitrate as N Standard in Water	Water	500 ml
IC125.NO2N1000.W	Ion Chromatography 1000mg/L Nitrite as N Standard in Water	Water	100 ml
IC250NO2N1000.W	Ion Chromatography 1000mg/L Nitrite as N Standard in Water	Water	250 ml
IC500.NO2N1000.W	Ion Chromatography 1000mg/L Nitrite as N Standard in Water	Water	500 ml
IC125.CN1000.W	Ion Chromatography 1000mg/L Cyanide Standard in Water	Water	100 ml
IC250.CN1000.W	Ion Chromatography 1000mg/L Cyanide Standard in Water	Water	250 ml
IC500.CN1000.W	Ion Chromatography 1000mg/L Cyanide Standard in Water	Water	500 ml
IC125.I1000.W	Ion Chromatography 1000mg/L Iodide Standard in Water	Water	100 ml
IC500.I1000.W	Ion Chromatography 1000mg/L Iodide Standard in Water	Water	500 ml
IC125.NA1000.W	Ion Chromatography 1000mg/L Sodium Standard in Water	Water	100 ml

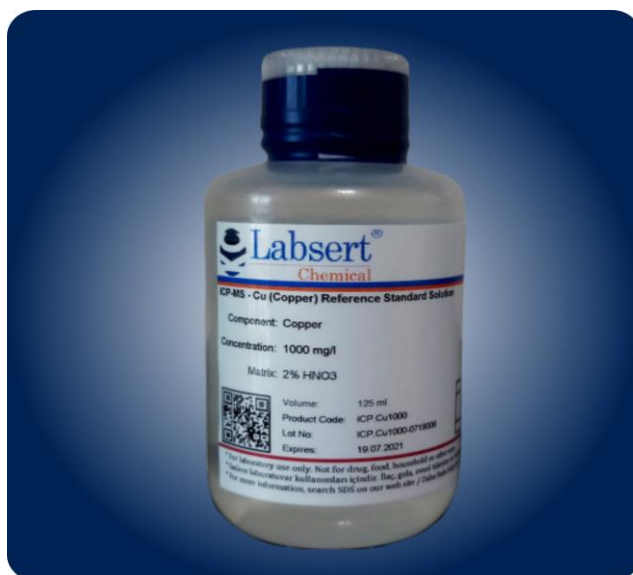


The certified values are obtained by gravimetric and volumetric preparations. It is confirmed against certified reference materials traceable to SI of NIST.

# AAS

## REFERENCE STANDARD

### SOLUTIONS





## AAS Reference Standards

Ionisation Buffers			
Product No	Explanation	Matrix	Volume
AAS125.SR20000.2NA	AAS 2% Strontium Ionisation Buffer Standard in 2% HNO <sub>3</sub>	%2 HNO <sub>3</sub>	100 ml
AAS125.CS20000.1NA	AAS 2% Cesium Ionisation Buffer Standard in 1% HNO <sub>3</sub>	%1 HNO <sub>3</sub>	100 ml
AAS125.LI20000.1NA	AAS 2% Lithium Ionisation Buffer Standard in 1% HNO <sub>3</sub>	%1 HNO <sub>3</sub>	100 ml
Reagents for AAS Flame			
Product No	Explanation	Matrix	Volume
AAS125.LA20000.2CA	AAS 2% Lanthanum Reagents for AAS Flame in 2% HCl	%2 HCl	100 ml
AAS500.LA20000.2CA	AAS 2% Lanthanum Reagents for AAS Flame in 2% HCl	%2 HCl	500 ml
AAS125.SR20000.2CA	AAS 2% Strontium Reagents for AAS Flame in 2% HCl	%2 HCl	100 ml
AAS500.SR20000.2CA	AAS 2% Strontium Reagents for AAS Flame in 2% HCl	%2 HCl	500 ml
Standards for Graphite Furnace			
Product No	Explanation	Matrix	Volume
AAS125.SB002.1NA	AAS 0.02 mg/l Antimony Calibration Standard in 1% HNO <sub>3</sub>	%1 HNO <sub>3</sub>	100 ml
AAS125.AR002.1NA	AAS 0.02 mg/l Arsenic Calibration Standard in 1% HNO <sub>3</sub>	%1 HNO <sub>3</sub>	100 ml
AAS125.CD002.1NA	AAS 0.02 mg/l Cadmium Calibration Standard in 1% HNO <sub>3</sub>	%1 HNO <sub>3</sub>	100 ml
AAS125.PB002.1NA	AAS 0.02 mg/l Lead Calibration Standard in 1% HNO <sub>3</sub>	%1 HNO <sub>3</sub>	100 ml
AAS125.MG002.1NA	AAS 0.02 mg/l Magnesium Calibration Standard in 1% HNO <sub>3</sub>	%1 HNO <sub>3</sub>	100 ml
AAS125.NI002.1NA	AAS 0.02 mg/l Nickel Calibration Standard in 1% HNO <sub>3</sub>	%1 HNO <sub>3</sub>	100 ml

# WET CHEMISTRY REFERENCE STANDARD SOLUTIONS



## Wet Chemistry Reference Standards and Analytical Reagents

Product No	Explanation	Matrix	Volume
CY500.500.W	500 uS/cm Conductivity Reference Standard Solution	Water	500 ml
CY1000.500.W	500 uS/cm Conductivity Reference Standard Solution	Water	1000 ml
CY500.84.W	84 uS/cm Conductivity Reference Standard Solution	Water	500 ml
CY1000.84.W	84 uS/cm Conductivity Reference Standard Solution	Water	1000 ml
CY500.1000.W	1000 uS/cm Conductivity Reference Standard Solution	Water	500 ml
CY1000.1000.W	1000 uS/cm Conductivity Reference Standard Solution	Water	1000 ml
CY500.147.W	147 uS/cm Conductivity Reference Standard Solution	Water	500 ml
CY1000.147.W	147 uS/cm Conductivity Reference Standard Solution	Water	1000 ml
CY500.1413.W	1413 uS/cm Conductivity Reference Standard Solution	Water	500 ml
CY1000.1413.W	1413 uS/cm Conductivity Reference Standard Solution	Water	1000 ml
CY500.2000.W	2000 uS/cm Conductivity Reference Standard Solution	Water	500 ml
CY1000.2000.W	2000 uS/cm Conductivity Reference Standard Solution	Water	1000 ml
CY500.1500.W	1500 uS/cm Conductivity Reference Standard Solution	Water	500 ml
CY1000.1500.W	1500 uS/cm Conductivity Reference Standard Solution	Water	1000 ml
CY500.3000.W	3000 uS/cm Conductivity Reference Standard Solution	Water	500 ml
CY1000.3000.W	3000 uS/cm Conductivity Reference Standard Solution	Water	1000 ml
CY500.12880.W	12.88 mS/cm Conductivity Reference Standard Solution	Water	500 ml
CY1000.12880.W	12.88 mS/cm Conductivity Reference Standard Solution	Water	1000 ml
COD25x4.500.W	Chemical Oxygen Demand Reference Standard Solution 500 mg/l	Water	4 x 25 ml
COD100.500.W	Chemical Oxygen Demand Reference Standard Solution 500 mg/l	Water	100 ml
COD100.1000.W	Chemical Oxygen Demand Reference Standard Solution 1000 mg/l	Water	100 ml
COD100.2000.W	Chemical Oxygen Demand Reference Standard Solution 2000 mg/l	Water	100 ml
W.C.2500	Chromatography Grade Ultra Pure Water	Water	2500 ml
TISAB1.500.W	TISAB I Standard Solution	Water	500 ml
TISAB1.1000.W	TISAB I Standard Solution	Water	1000 ml

## Wet Chemistry Reference Standards and Analytical Reagents

Product No	Explanation	Matrix	Volume
PL100.1000.W	Phenol 1000 mg/l Reference Standard Solution in Water	Water	100 ml
PL500.1000.W	Phenol 1000 mg/l Reference Standard Solution in Water	Water	500 ml
TPL100.1000.W	Total Phenolics Reference Standard Solution 1000 mg/l in Water	Water	100 ml
TPL500.1000.W	Total Phenolics Reference Standard Solution 1000 mg/l in Water	Water	500 ml
MBASA100.1000.W	MBAS-Alkyl 1000 mg/l Reference Standard Solution in Water	Water	100 ml
MBASA25x4.1000.W	MBAS-Alkyl 1000 mg/l Reference Standard Solution in Water	Water	25 ml x 4
MBAS100.1000.W	MBAS-SDBS 1000 mg/l Reference Standard Solution in Water	Water	100 ml
MBAS25x4.1000.W	MBAS-SDBS 1000 mg/l Reference Standard Solution in Water	Water	25 ml x 4
CR100.500.10CA	Color 500 Pt-Co Reference Standard Solution in 10% HCl	10% HCl	100 ml
CR25.500.10CA	Color 500 Pt-Co Reference Standard Solution in 10% HCl	10% HCl	25 ml
CR25x4.500.10CA	Color 500 Pt-Co Reference Standard Solution in 10% HCl	10% HCl	25 ml x 4
FCL5.100.W	Free Chlorine Reference Standard Solution 100 mg/l	Water	5 ml
FCL1.1000.W	Free Chlorine Reference Standard Solution 1000 mg/l	Water	1 ml
FCL100.100.W	Free Chlorine Reference Standard Solution 100 mg/l	Water	500 ml
OG25.40.IPA	Oil&Grease Reference Standard Solution 40 mg/l in Isopropanol (Certified value is obtained after 1:100 dilution to 2 liter water)	Isopropanol	25 ml
OG25.4000.IPA	Oil&Grease Reference Standard Solution 4000 mg/l in Isopropanol	Isopropanol	25 ml
OG25.40.ACE	Oil&Grease Reference Standard Solution 40 mg/l in Acetone (Certified value is obtained after 1:100 dilution to 2 liter water)	Acetone	25 ml
OG1000.40.WtrACE	Oil&Grease Reference Standard Solution 40 mg/l in Water	Water + Tr Acetone	1000 ml
OG25.4000.ACE	Oil&Grease Reference Standard Solution 4000 mg/l in Acetone	Acetone	25 ml
TCR100.1000.W	Total Chromium Reference Standard Solution 1000 mg/l in Water	Water	100 ml
TCR500.1000.W	Total Chromium Reference Standard Solution 1000 mg/l in Water	Water	500 ml
AK100.1000.W	Alkalinity Reference Standard Solution 1000 mg/l (As CaCO <sub>3</sub> )	Water	100 ml
AK500.1000.W	Alkalinity Reference Standard Solution 1000 mg/l (As CaCO <sub>3</sub> )	Water	500 ml
HS100.1000.1CA	Calcium Hardness Reference Standard Solution 1000 mg/l in Water	Water	100 ml
THS100.1000.1CA	Total Hardness Reference Standard Solution 1000 mg/l	Water	100 ml

## Wet Chemistry Reference Standards and Analytical Reagents

Product No	Explanation	Matrix	Volume
FE100.1000.W5MeOH	Formaldehyde Reference Standard Solution 1000 mg/l in Water (5% MeOH)	5% MeOH	100 ml
EO50.500.W1MeOH	Ethylene Oxide Reference Standard Solution 500 mg/l	1% MeOH	50 ml
2CL100.1000.W	Ethylene Chlorohydrine Reference Standard Solution 1000 mg/l	Water	100 ml
TCL25x4.100.W	Total Residual Chlorine Reference Standard Solution 100 mg/l	Water	25 ml x 4
TCL100.1000.W	Total Residual Chlorine Reference Standard Solution 1000 mg/l	Water	100 ml
TCL500.1000.W	Total Residual Chlorine Reference Standard Solution 1000 mg/l	Water	500 ml
TH25.80.ACE	Total Hydrocarbon Content Reference Standard Solution 80 mg/l (Certified value is obtained after 1:50 dilution 1 liter water)	Acetone	25 ml
HPER100.1000.W	Hydrogen Peroxide Reference Standard Solution 1000 mg/l in Water	Water	100 ml
TKN100.1000.W	Total Kjeldahl Nitrogen Reference Standard Solution 1000 mg/l in Water	Water	100 ml
TKN500.1000.W	Total Kjeldahl Nitrogen Reference Standard Solution 1000 mg/l in Water	Water	500 ml
Setsol.1000	1000 mg/l - Total Settleable Solids Reference Standard	Water	1000 ml
TSS.1000	1000mg/l - Total Suspended Solids Reference Standard.	Water	1000 ml
TSM.1000	1000 mg/l - Total Solid Matters Reference Standard	Water	1000 ml
TDS.1000	Total Dissolved Solids Standard Solution 1000 mg/l in Water	Water	1000 ml
SAL.10000	10.000 mg/l - Salinity Standard	Water	500 ml
PP100.1000.W	1000 mg/l - 100 ml - Potassium Permanganate Reference Standard Solution in Water	Water	100 ml
PP500.1000.W	1000 mg/l - 500 ml - Potassium Permanganate Reference Standard Solution in Water	Water	500 ml
TOC500.05.W	0.5 mg/l - 500 ml - TOC Standard as potassium hydrogen phthalate	Water	500 ml
TOC100.10.W	10 mg/l - 100 ml - TOC Standard as potassium hydrogen phthalate	Water	100 ml
TOC500.10.W	10 mg/l - 500 ml - TOC Standard as potassium hydrogen phthalate	Water	500 ml
TOC100.100.W	100 mg/l - 100 ml - TOC Standard as potassium hydrogen phthalate	Water	100 ml
TOC500.100.W	100 mg/l - 500 ml - TOC Standard as potassium hydrogen phthalate	Water	500 ml
TOC100.200.W	200 mg/l - 100 ml - TOC Standard as potassium hydrogen phthalate	Water	100 ml
TOC500.200.W	200 mg/l - 500 ml - TOC Standard as potassium hydrogen phthalate	Water	500 ml
TOC500.500.W	500 mg/l - 500 ml - TOC Standard as potassium hydrogen phthalate	Water	500 ml

## Wet Chemistry Reference Standards and Analytical Reagents

Product No	Explanation	Matrix	Volume
TOC100.500.W	500 mg/l - 100 ml - TOC Standardas potassium hydrogen phthalate	Water	100 ml
TOC500.1000.W	1000 mg/l - 500 ml - TOC Standardas potassium hydrogen phthalate	Water	500 ml
TOC100.1000.W	1000 mg/l - 100 ml - TOC Standardas potassium hydrogen phthalate	Water	100 ml
TY50x3.Set1.W	0.02-10-1000 NTU Turbidity Reference Standard Set	Water	50ml x 3
TY100x3.Set1.W	0.02-10-1000 NTU Turbidity Reference Standard Set	Water	100ml x 3
TY500.1.W	1 NTU Turbidity Reference Standard Solution	Water	500 ml
TY100.1.W	1 NTU Turbidity Reference Standard Solution	Water	100 ml
TY500.10.W	10 NTU Turbidity Reference Standard Solution	Water	500 ml
TY100.10.W	10 NTU Turbidity Reference Standard Solution	Water	100 ml
TY500.20.W	20 NTU Turbidity Reference Standard Solution	Water	500 ml
TY100.20.W	20 NTU Turbidity Reference Standard Solution	Water	100 ml
TY500.50.W	50 NTU Turbidity Reference Standard Solution	Water	500 ml
TY100.50.W	50 NTU Turbidity Reference Standard Solution	Water	100 ml
TY100.100.W	100 NTU Turbidity Reference Standard Solution	Water	100 ml
TY500.100.W	100 NTU Turbidity Reference Standard Solution	Water	500 ml
TY500.200.W	200 NTU Turbidity Reference Standard Solution	Water	500 ml
TY100.200.W	200 NTU Turbidity Reference Standard Solution	Water	100 ml
TY500.500.W	500 NTU Turbidity Reference Standard Solution	Water	500 ml
TY100.500.W	500 NTU Turbidity Reference Standard Solution	Water	100 ml
TY500.1000.W	1000 NTU Turbidity Reference Standard Solution	Water	500 ml
TY100.1000.W	1000 NTU Turbidity Reference Standard Solution	Water	100 ml
TY500.2000.W	2000 NTU Turbidity Reference Standard Solution	Water	500 ml
TY100.2000.W	2000 NTU Turbidity Reference Standard Solution	Water	100 ml
PH500.2.W	pH 2 Reference Standard Solution	Water	500 ml
PH1000.2.W	pH 2 Reference Standard Solution	Water	1000 ml

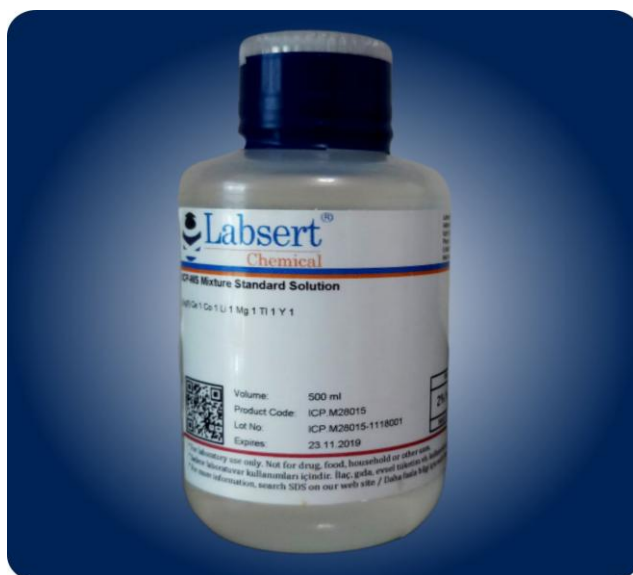
## Wet Chemistry Reference Standards and Analytical Reagents

Product No	Explanation	Matrix	Volume
PH500.3.W	pH 3 Reference Standard Solution	Water	500 ml
PH1000.3.W	pH 3 Reference Standard Solution	Water	1000 ml
PH500.4.W	pH 4 Reference Standard Solution	Water	500 ml
PH1000.4.W	pH 4 Reference Standard Solution	Water	1000 ml
PH500.5.W	pH 5 Reference Standard Solution	Water	500 ml
PH1000.5.W	pH 5 Reference Standard Solution	Water	1000 ml
PH500.6.W	pH 6 Reference Standard Solution	Water	500 ml
PH1000.6.W	pH 6 Reference Standard Solution	Water	1000 ml
PH500.7.W	pH 7 Reference Standard Solution	Water	500 ml
PH1000.7.W	pH 7 Reference Standard Solution	Water	1000 ml
PH500.8.W	pH 8 Reference Standard Solution	Water	500 ml
PH1000.8.W	pH 8 Reference Standard Solution	Water	1000 ml
PH500.9.W	pH 9 Reference Standard Solution	Water	500 ml
PH1000.9.W	pH 9 Reference Standard Solution	Water	1000 ml
PH500.10.W	pH 10 Reference Standard Solution	Water	500 ml
PH1000.10.W	pH 10 Reference Standard Solution	Water	1000 ml
PH500.11.W	pH 11 Reference Standard Solution	Water	500 ml
PH1000.11.W	pH 11 Reference Standard Solution	Water	1000 ml
PH500.12.W	pH 12 Reference Standard Solution	Water	500 ml
PH1000.12.W	pH 12 Reference Standard Solution	Water	1000 ml



The reference standard solution is manufactured using a high-purity starting material. The matrix of standard solution is 18 MOhm deionized water and chromatography grade acid solution

# SPECTROSCOPY REFERENCE STANDARD SOLUTIONS





## Spectrofotometer Reference Standards

Product No	Explanation	Matrix	Volume
UV100.TP1000.W	Reference Standard Solution - UV-Vis - Total Phosphorus in Water. Certified reference standard is suitable for SM 4500-P C,E and F methods.	Water	100 ml
UV100.CR1000.W	Reference Standard Solution - UV-Vis - Chromium (VI) in Water. Certified reference standard is suitable for SM 3500-Cr B method.	Water	100 ml
UV100.TN1000.W	Reference Standard Solution - UV-Vis - Total Nitrogen Standard sum of nitrate as N and ammonium as N in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-N	Water	100 ml
UV100.NH41000.W	Reference Standard Solution - UV-Vis - Ammonium from Ammonium Chloride in Water. This reference standard solution is suitable for SM-4500 NH3 D,E,F and G methods.	Water	100 ml
UV100.NH4N1000.W	Reference Standard Solution - UV-Vis - Ammonium as N Standard in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM Methods.	Water	100 ml
UV500.TP1000.W	Reference Standard Solution - UV-Vis - Total Phosphorus in Water. Certified reference standard is suitable for SM 4500-P C,E and F methods.	Water	500 ml
UV500.CR1000.W	Reference Standard Solution - UV-Vis - Chromium in Water. Certified reference standard is suitable for SM 3500-Cr B method.	Water	500 ml
UV500.TN1000.W	Reference Standard Solution - UV-Vis - Total Nitrogen Standard sum of nitrate as N and ammonium as N in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-N	Water	500 ml
UV500.NH41000.W	Reference Standard Solution - UV-Vis - Ammonium from Ammonium Chloride in Water. This reference standard solution is suitable for SM-4500 NH3 D,E,F and G methods.	Water	500 ml
UV500.NH4N1000.W	Reference Standard Solution - UV-Vis - Ammonium as N Standard in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM Methods.	Water	500 ml
UV100.CCN1000.W04SH	Reference Standard Solution - UV-Vis - Complex Cyanide in Water (0.4% NaOH). Certified reference standard is suitable for spectrophotometric and titrimetric analysis according to SM 4500-CN Methods.	Water	100 ml
UV500.CCN1000.W04SH	Reference Standard Solution - UV-Vis - Complex Cyanide in Water (0.4% NaOH). Certified reference standard is suitable for spectrophotometric and titrimetric analysis according to SM 4500-CN Methods.	Water	500 ml
UV100.TCN1000.W04SH	Reference Standard Solution - UV-Vis - Total Cyanide in Water (0.4% NaOH). Certified reference standard is suitable for spectrophotometric and titrimetric analysis according to SM 4500-CN Methods.	Water	100 ml
UV500.TCN1000.W04SH	Reference Standard Solution - UV-Vis - Total Cyanide in Water (0.4% NaOH). Certified reference standard is suitable for spectrophotometric and titrimetric analysis according to SM 4500-CN Methods.	Water	500 ml
UV100.FCN1000.W04SH	Reference Standard Solution - UV-Vis - Free Cyanide in Water (0.4% NaOH). Certified reference standard is suitable for spectrophotometric and titrimetric analysis according to SM 4500-CN Methods.	Water	100 ml
UV500.FCN1000.W04SH	Reference Standard Solution - UV-Vis - Free Cyanide in Water (0.4% NaOH). Certified reference standard is suitable for spectrophotometric and titrimetric analysis according to SM 4500-CN Methods.	Water	500 ml
UV100.HY1000.W04SH	Reference Standard Solution - UV-Vis - Hydrazine (From hydrazine sulfate) in Water (0.4 % NaOH). Certified reference standard is suitable for spectrophotometric analysis.	Water	100 ml
UV100.F1000.W	Reference Standard Solution - UV-Vis - Fluoride in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-F method.	Water	100 ml
UV500.F1000.W	Reference Standard Solution - UV-Vis - Fluoride in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-F method.	Water	500 ml
UV100.BR1000.W	Reference Standard Solution - UV-Vis - Bromide in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-Br method	Water	100 ml
UV500.BR1000.W	Reference Standard Solution - UV-Vis - Bromide in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-Br method	Water	500 ml
UV100.SCN1000.W	Reference Standard Solution - UV-Vis - Thiocyanate in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-CN method	Water	100 ml
UV500.SCN1000.W	Reference Standard Solution - UV-Vis - Thiocyanate in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-CN method	Water	500 ml
UV100.I1000.W	Reference Standard Solution - UV-Vis - Iodide in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-I- method.	Water	100 ml
UV500.I1000.W	Reference Standard Solution - UV-Vis - Iodide in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-I- method.	Water	500 ml
UV100.NO21000.W	Reference Standard Solution - UV-Vis - Nitrite in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-NO2 method.	Water	100 ml

## Spectrofotometer Reference Standards

Product No	Explanation	Matrix	Volume
UV500.NO21000.W	Reference Standard Solution - UV-Vis - Nitrite in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-NO2 method.	Water	500 ml
UV100.NO2N1000.W	Reference Standard Solution - UV-Vis - Nitrite as N in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM-4500-NO2 method.	Water	100 ml
UV100.NO31000.W	Reference Standard Solution - UV-Vis - Nitrate in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-NO3 B method.	Water	100 ml
UV500.NO31000.W	Reference Standard Solution - UV-Vis - Nitrate in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-NO3 B method.	Water	500 ml
UV100.NO3N1000.W	Reference Standard Solution - UV-Vis - Nitrate as N in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-NO3 B method.	Water	100 ml
UV100.CU1000.W	Reference Standard Solution - UV-Vis - Copper in Water. Certified reference standard is suitable for spectrophotometric analysis.	Water	100 ml
UV500.CU1000.W	Reference Standard Solution - UV-Vis - Copper in Water. Certified reference standard is suitable for spectrophotometric analysis.	Water	500 ml
UV100.CA1000.W	Reference Standard Solution - UV-Vis - Calcium in Water. Value of calcium reference standard solution is based on its reaction with cresolphthalein complexone; mutual interference should be minimized by using 8-hydroxyquinoline for determination of Ca. Standard Working concentration ranges of 0.5-5 ppm for Ca.	Water	100 ml
UV500.CA1000.W	Reference Standard Solution - UV-Vis - Calcium in Water. Value of calcium reference standard solution is based on its reaction with cresolphthalein complexone; mutual interference should be minimized by using 8-hydroxyquinoline for determination of Ca. Standard Working concentration ranges of 0.5-5 ppm for Ca.	Water	500 ml
UV100.SO41000.W	Reference Standard Solution - UV-Vis - Sulfate in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-SO4 E method.	Water	100 ml
UV500.SO41000.W	Reference Standard Solution - UV-Vis - Sulfate in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-SO4 E method.	Water	500 ml
UV100.MG1000.W	Reference Standard Solution - UV-Vis - Magnesium in Water. Value of magnesium reference standard solution is based on its reaction with cresolphthalein complexone; mutual interference should be minimized by using ethylene glycol – bis(β- aminoethyl ether)-N,N,N',N' –tetraacetic acid (EGTA) for determination of Mg. Standard Working concentration ranges of 0.5-10 ppm for Mg.	Water	100 ml
UV500.MG1000.W	Reference Standard Solution - UV-Vis - Magnesium in Water. Value of magnesium reference standard solution is based on its reaction with cresolphthalein complexone; mutual interference should be minimized by using ethylene glycol – bis(β- aminoethyl ether)-N,N,N',N' –tetraacetic acid (EGTA) for determination of Mg. Standard Working concentration ranges of 0.5-10 ppm for Mg.	Water	500 ml
UV1.SO31000.W05EA	Reference Standard Solution - UV-Vis - Sulfite in Water (0.5% EDTA). Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-SO3 method.	Water	1 ml
UV5.SO31000.W05EA	Reference Standard Solution - UV-Vis - Sulfite in Water (0.5% EDTA). Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-SO3 method.	Water	5 ml
UV100.B1000.W	Reference Standard Solution - UV-Vis - Boron in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-B method.	Water	100 ml
UV500.B1000.W	Reference Standard Solution - UV-Vis - Boron in Water. Certified reference standard is suitable for spectrophotometric analysis according to SM 4500-B method.	Water	500 ml
UV100.AL1000.W	Reference Standard Solution - UV-Vis - Aluminium in Water. Certified reference standard is suitable for spectrophotometric analysis.	Water	100 ml
UV500.AL1000.W	Reference Standard Solution - UV-Vis- Aluminium in Water. Certified reference standard is suitable for spectrophotometric analysis.	Water	500 ml
UV5.S1000.W1SH	Reference Standard Solution - UV-Vis- Sulfide in Water. Certified reference standard is suitable for spectrophotometric analysis.	Water	5 ml
UV1.S1000.W1SH	Reference Standard Solution - UV-Vis- Sulfide in Water. Certified reference standard is suitable for spectrophotometric analysis.	Water	1 ml

All raw materials used for manufacture of reference materials are selected at high purity level. Following completion of manufacture, bottles are made ready for shipment by being placed in aluminum locked packages to minimize environmental effects and for extra protection.

# VOLUMETRIC SOLUTIONS AND ANALYTICAL REAGENTS



Volumetric Solutions			
Product No	Explanation	Matrix	Volume
EC05.NA2CO3.05M	Volumetric Solution for Chromatography 0.5M Na2CO3	Water	500 ml
EC05.NA2CO3.005M	Volumetric Solution for Chromatography 0.05M Na2CO3	Water	500 ml
EC05.NAHCO3.05M	Volumetric Solution for Chromatography 0.5M NaHCO3	Water	500 ml
EC05.NAHCO3.005M	Volumetric Solution for Chromatography 0.05M NaHCO3	Water	500 ml
EC.MSA.0.5M	Volumetric Solution for Chromatography 0.5M MSA	Water	500 ml
EC1.NA2CO3.005M	Volumetric Solution for Chromatography 0.05M Na2CO3	Water	1000 ml
EC1.NAHCO3.005M	Volumetric Solution for Chromatography 0.05M NaHCO3	Water	1000 ml
EC1.NA2CO3.05M	Volumetric Solution for Chromatography 0.5M Na2CO3	Water	1000 ml
EC1.NAHCO3.05M	Volumetric Solution for Chromatography 0.5M NaHCO3	Water	1000 ml

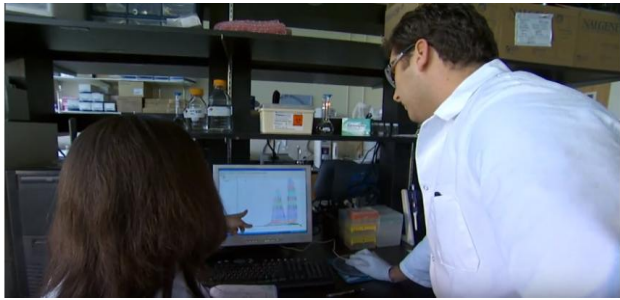


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# SOIL REFERENCE STANDARD MATERIALS



Soil Reference Standards			
Product No	Explanation	Matrix	Volume
Soil.CY.001	Conductivity in soil certified reference standard material	Soil	50 g
Soil.PH.001	pH in Soil Reference Standard	Soil	50 g
Soil.TOM.001	Total organic matter in Soil Reference Standard	Soil	25 g
Soil.EL.001	Elements in Soil Reference Standard - 1	Soil	25 g
Soil.Mix.001	Multi Parameters in Soil Reference Standard - 1	Soil	125 g



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# *EPA SERIES ORGANIC REFERENCE STANDARD MATERIALS*



EPA 500 Series			
Product No	Explanation	Matrix	Volume
E500.M.001	EPA 552 - PAH Standard Solution 16 components. 1000 mg/l each of Acenaphthene [CAS:83-32-9]; Acenaphthylene [CAS:208-96-8]; Anthracene [CAS:120-12-7]; Benzo(a)anthracene [CAS:56-55-3]; Benzo(a)pyrene [CAS:50-32-8]; Benzo(b)fluoranthene [CAS:205-99-2]; Benzo(g,h,i)perylene [CAS:191-24-2]; Benzo(k)fluoranthene [CAS:207-08-9]; Chrysene [CAS:218-01-9]; Dibenzo(a,h)anthracene [CAS:53-70-3]; Fluoranthene [CAS:206-44-0]; Fluorene [CAS:86-73-7]; Indeno(1,2,3-c,d)pyrene [CAS:193-39-5]; Naphthalene [CAS:91-20-3]; Phenanthrene [CAS:85-01-8]; Pyrene [CAS:129-00-0] in Acetonitrile	Acetonitrile	1 ml
E500.M.002	EPA 501 - 200 mg/l each of Bromodichloromethane [CAS:75-27-4]; Tribromomethane (Bromoform) [CAS:75-25-2]; Dibromochloromethane [CAS:124-48-1]; Chloroform [CAS:67-66-3] in Methanol	Methanol	1 ml
E500.M.003	EPA 501 - 2000 mg/l each of Bromodichloromethane [CAS:75-27-4]; Tribromomethane (Bromoform) [CAS:75-25-2]; Dibromochloromethane [CAS:124-48-1]; Chloroform [CAS:67-66-3] in Methanol	Methanol	1 ml

EPA 600 Series			
Product No	Explanation	Matrix	Volume
E600.M.001	EPA 610 - PAH Standard Solution 16 components. 100 mg/l each of Acenaphthene [CAS:83-32-9]; Acenaphthylene [CAS:208-96-8]; Anthracene [CAS:120-12-7]; Benzo(a)anthracene [CAS:56-55-3]; Benzo(a)pyrene [CAS:50-32-8]; Benzo(b)fluoranthene [CAS:205-99-2]; Benzo(g,h,i)perylene [CAS:191-24-2]; Benzo(k)fluoranthene [CAS:207-08-9]; Chrysene [CAS:218-01-9]; Dibenzo(a,h)anthracene [CAS:53-70-3]; Fluoranthene [CAS:206-44-0]; Fluorene [CAS:86-73-7]; Indeno(1,2,3-c,d)pyrene [CAS:193-39-5]; Naphthalene [CAS:91-20-3]; Phenanthrene [CAS:85-01-8]; Pyrene [CAS:129-00-0] in Methanol / Dichloromethane (1/1)	Methanol / Dichloromethane (1/1)	1 ml

EPA 8000 Series			
Product No	Explanation	Matrix	Volume
E8000.M.001	EPA 8100 - PAH standard solution 16 components. 1000ug/ml each of Acenaphthene [CAS:83-32-9]; Acenaphthylene [CAS:208-96-8]; Anthracene [CAS:120-12-7]; Benzo(a)anthracene [CAS:56-55-3]; Benzo(a)pyrene [CAS:50-32-8]; Benzo(b)fluoranthene [CAS:205-99-2]; Benzo(g,h,i)perylene [CAS:191-24-2]; Benzo(k)fluoranthene [CAS:207-08-9]; Chrysene [CAS:218-01-9]; Dibenzo(a,h)anthracene [CAS:53-70-3]; Fluoranthene [CAS:206-44-0]; Fluorene [CAS:86-73-7]; Indeno(1,2,3-c,d)pyrene [CAS:193-39-5]; Naphthalene [CAS:91-20-3]; Phenanthrene [CAS:85-01-8]; Pyrene [CAS:129-00-0] in Dichloromethane	Dichloromethane	1 ml
E8000.M.002	EPA 8000 Series - Pesticide - 18 Components Standard Solution 100 mg/l each of Aldrin [CAS:309-00-2]; Alpha-HCH [CAS:319-84-6]; Beta-HCH [CAS:319-85-7]; Gamma-HCH (Lindane) [CAS:58-89-9]; Delta-HCH [CAS:319-86-8]; 4,4'-DDD (TDE) [CAS:72-54-8]; 4,4'-DDE [CAS:72-55-9]; 4,4'-DDT [CAS:50-29-3]; Dieldrin [CAS:60-57-1]; Endosulfan-alpha [CAS:959-98-8]; Endosulfan-beta [CAS:33213-65-9]; Endosulfan-total (sulfate) [CAS:1031-07-8]; Endrin [CAS:72-20-8]; Endrin aldehyde [CAS:7421-93-4]; Endrin ketone [CAS:53494-70-5]; Heptachlor [CAS:76-44-8]; Heptachlor-exo-epoxide [CAS:1024-57-3]; Methoxychlor (DMTD) [CAS:72-43-5] in Hexane:Toluene (1:1)	Hexane:Toluene (1:1)	1 ml



# *SINGLE COMPONENT ORGANIC CHEMISTRY REFERENCE STANDARDS*



Polyaromatic Hydrocarbons (PAHs)			
Product No	Explanation	Matrix	Volume
PAH1.100.001	Acenaphthene 100 mg/l	Acetonitrile	1 ml
PAH1.100.002	Acenaphthylene 100 mg/l	Acetonitrile	1 ml
PAH1.100.006	Anthracene 100 mg/l	Acetonitrile	1 ml
PAH1.100.013	Benzo(a)anthracene 100 mg/l	Acetonitrile	1 ml
PAH1.100.021	Benzo(b)fluoranthene 100 mg/l	Acetonitrile	1 ml
PAH1.100.024	Benzo(k)fluranthene 100 mg/l	Acetonitrile	1 ml
PAH1.100.031	Benzo(g,h,i)perylene 100 mg/l	Acetonitrile	1 ml
PAH1.100.033	Benzo(a)pyrene 100 mg/l	Acetonitrile	1 ml
PAH1.100.040	Chrysene 100 mg/l	Acetonitrile	1 ml
PAH1.100.048	Dinbenz(a,h)anthracene 100 mg/l	Acetonitrile	1 ml
PAH1.100.062	Fluoranthene 100 mg/l	Acetonitrile	1 ml
PAH1.100.063	Fluorene 100 mg/l	Acetonitrile	1 ml
PAH1.100.065	Indeno(1,2,3_cd)pyrene 100 mg/l	Acetonitrile	1 ml
PAH1.100.069	Naphthalene 100 mg/l	Acetonitrile	1 ml
PAH1.100.072	Phenanthrene 100 mg/l	Acetonitrile	1 ml
PAH1.100.084	Pyrene 100 mg/l	Acetonitrile	1 ml

Pesticides			
Product No	Explanation	Matrix	Volume
PES1.100.001	Aldrin 100 mg/l	Methanol	1 ml
PES1.100.002	alphaBHC 100 mg/l	Methanol	1 ml
PES1.100.003	betaBHC 100 mg/l	Methanol	1 ml
PES1.100.004	gammaBHC 100 mg/l	Methanol	1 ml
PES1.100.005	deltaBHC 100 mg/l	Methanol	1 ml
PES1.100.006	4,4'-DDD 100 mg/l	Methanol	1 ml
PES1.100.007	4,4'-DDE 100 mg/l	Methanol	1 ml
PES1.100.008	4,4'-DDT 100 mg/l	Methanol	1 ml
PES1.100.009	Dieldrin 100 mg/l	Methanol	1 ml
PES1.100.010	alpha-Endosulfan 100 mg/l	Methanol	1 ml
PES1.100.011	beta-Endosulfan 100 mg/l	Methanol	1 ml
PES1.100.018	Endosulfansulfate 100 mg/l	Methanol	1 ml
PES1.100.012	Endrin 100 mg/l	Methanol	1 ml
PES1.100.019	Endrinaldehyde 100 mg/l	Methanol	1 ml
PES1.100.013	2,4-DDT 100 mg/l	Methanol	1 ml
PES1.100.014	Heptachlor 100 mg/l	Methanol	1 ml
PES1.100.015	Heptachlorepoxyde 100 mg/l	Methanol	1 ml
PES1.100.016	mHexachlorobenzene 100 mg/l	Methanol	1 ml
PES1.100.017	Methoxychlor 100 mg/l	Methanol	1 ml
PES1.100.020	Azinphos-methyl 100 mg/l	hexane:acetone (9:1)	1 ml
PES1.100.021	Chlorpyrifos 100 mg/l	hexane:acetone (9:1)	1 ml
PES1.100.022	Dichlorvos 100 mg/l	hexane:acetone (9:1)	1 ml
PES1.100.023	Disulfoton 100 mg/l	hexane:acetone (9:1)	1 ml
PES1.100.024	Ethoprophos 100 mg/l	hexane:acetone (9:1)	1 ml
PES1.100.025	Fenclorphos 100 mg/l	hexane:acetone (9:1)	1 ml
PES1.100.026	Parathion-methyl 100 mg/l	hexane:acetone (9:1)	1 ml
PES1.100.027	Prothiofos 100 mg/l	hexane:acetone (9:1)	1 ml

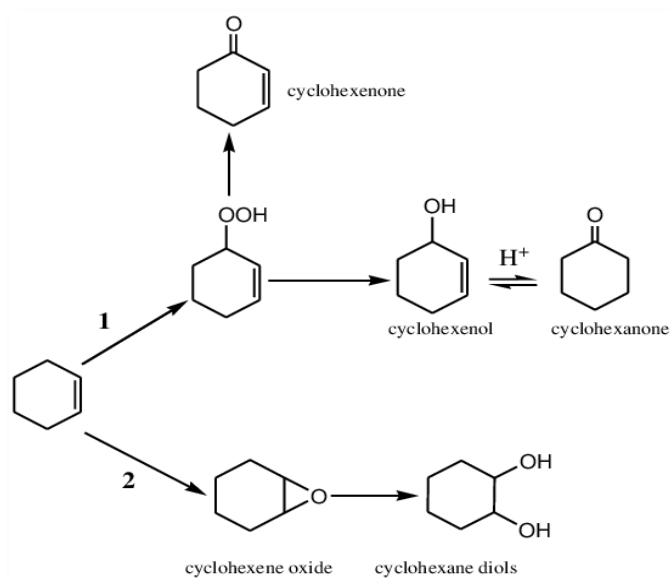
Pesticides			
Product No	Explanation	Matrix	Volume
PES1.100.028	Aldicarb 100 mg/l	Methanol	1 ml
PES1.100.029	Aldicarb-sulfone 100 mg/l	Methanol	1 ml
PES1.100.030	Aldicarb-sulfoxide 100 mg/l	Methanol	1 ml
PES1.100.031	Carbofuran 100 mg/l	Methanol	1 ml
PES1.100.032	Carbofuran-3-hydroxy 100 mg/l	Methanol	1 ml
PES1.100.033	1-Naphthyl-N-methylcarbamate 100 mg/l	Methanol	1 ml
PES1.100.034	Methiocarb 100 mg/l	Methanol	1 ml
PES1.100.035	Methomyl 100 mg/l	Methanol	1 ml
PES1.100.036	Oxamyl 100 mg/l	Methanol	1 ml
PES1.100.037	Propoxur 100 mg/l	Methanol	1 ml

Miscellaneous Single Component Standards			
Product No	Explanation	Matrix	Volume
VS1.100.001	100 mg/l - Acrylamide in Methanol	Methanol	1 ml
VS1.100.002	100 mg/l - Bromodichloromethane in Methanol	Methanol	1 ml
VS1.100.003	100 mg/l - Chloroform in Methanol	Methanol	1 ml
VS1.100.004	100 mg/l - Dibromochloromethane in Methanol	Methanol	1 ml
VS1.100.005	100 mg/l - Tribromomethane in Methanol	Methanol	1 ml
VS1.100.006	100 mg/l - Fluorobenzene in Methanol	Methanol	1 ml
VS1.100.007	100 mg/l - Toluene in Methanol	Methanol	1 ml



We use analytical standards as raw material and chromatography grade organic solvents for manufacturing of organic chemistry reference standard materials.

# MULTI COMPONENT ORGANIC CHEMISTRY REFERENCE STANDARDS



Polyaromatic Hydrocarbons (PAHs)			
Product No	Explanation	Matrix	Volume
PAH1.M.001	13 components PAH Mixture. 100ug/ml each of Acenaphthylene [CAS:208-96-8] ; Anthracene [CAS:120-12-7] ; Benzo(a)anthracene [CAS:56-55-3] ; Benzo(b)fluoranthene [CAS:205-99-2] ; Benzo(k)fluoranthene [CAS:207-08-9] ; Benzo(g,h,i)perylene [CAS:191-24-2] ; Benzo(a)pyrene [CAS:50-32-8] ; Chrysene [CAS:218-01-9] ; Dibenzo(a,h)anthracene [CAS:53-70-3] ; Fluorene [CAS:86-73-7] ; Indeno(1,2,3-c,d)pyrene [CAS:193-39-5] ; Phenanthrene [CAS:85-01-8] ; Pyrene [CAS:129-00-0] in Acetonitrile	Acetonitrile	1 ml

Pesticides			
Product No	Explanation	Matrix	Volume
PES1.M.001	Organochlorine Pesticides 4 Components: 100ug/ml each of Aldrin [CAS:309-00-2] ; Dieldrin [CAS:60-57-1] ; Heptachlor [CAS:76-44-8] ; Heptachlor-exo-epoxide [CAS:1024-57-3] in Methanol	Methanol	1 ml
PES1.M.002	Organochlorine Pesticide 20 components: 200 ug/ml each of Aldrin [CAS:309-00-2] ; Alpha-HCH (alpha-BHC) [CAS:319-84-6] ; Beta-HCH (beta-BHC) [CAS:319-85-7] ; Delta-HCH (delta-BHC) [CAS:319-86-8] ; Gamma-HCH (Lindane) (gamma-BHC) [CAS:58-89-9] ; 4,4'-DDD (TDE) [CAS:72-54-8] ; 4,4'-DDE [CAS:72-55-9] ; 4,4'-DDT [CAS:50-29-3] ; Dieldrin [CAS:60-57-1] ; Endosulfan-alpha (Endosulfan I) [CAS:959-98-8] ; Endosulfan-beta (Endosulfan II) [CAS:33213-65-9] ; Endosulfan-total (sulfate) [CAS:1031-07-8] ; Endrin [CAS:72-20-8] ; Endrin aldehyde [CAS:7421-93-4] ; Endrin ketone [CAS:53494-70-5] ; Heptachlor [CAS:76-44-8] ; Heptachlor-exo-epoxide (Heptachlor epoxide) [CAS:1024-57-3] ; Methoxychlor (DMTD) [CAS:72-43-5] ; cis-Chlordane [CAS:5103-71-9] ; trans-Chlordane [CAS:5103-74-2] in n-Hexane:Toluene (1:1)	Hexane:Toluene (1:1)	1 ml

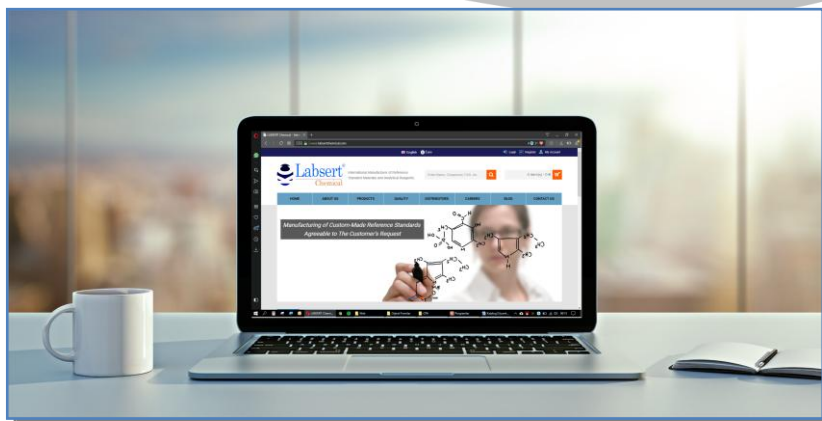
Volatile Organic Compounds (VOC)			
Product No	Explanation	Matrix	Volume
VOC1.M.001	VOC Liquids - 54 components; 200ug/ml each of Benzene [CAS:71-43-2] ; Bromobenzene [CAS:108-86-1] ; Bromochloromethane [CAS:74-97-5] ; Bromodichloromethane [CAS:75-27-4] ; Tribromomethane [CAS:75-25-2] ; n-Butylbenzene [CAS:104-51-8] ; sec-Butylbenzene [CAS:135-98-8] ; tert-Butylbenzene [CAS:98-06-6] ; Tetrachloromethane [CAS:56-23-5] ; Chlorobenzene [CAS:108-90-7] ; Chloroform [CAS:67-66-3] ; 2-Chlorotoluene [CAS:95-49-8] ; 4-Chlorotoluene [CAS:106-43-4] ; Dibromochloromethane [CAS:124-48-1] ; 1,2-Dibromo-3-chloropropane [CAS:96-12-8] ; 1,2-Dibromoethane [CAS:106-93-4] ; Dibromomethane [CAS:74-95-3] ; 1,2-Dichlorobenzene [CAS:95-50-1] ; 1,3-Dichlorobenzene [CAS:541-73-1] ; 1,4-Dichlorobenzene [CAS:106-46-7] ; 1,1-Dichloroethane [CAS:75-34-3] ; 1,2-Dichloroethane [CAS:107-06-2] ; 1,1-Dichloroethene [CAS:75-35-4] ; cis-1,2-Dichloroethene [CAS:156-59-2] ; trans-1,2-Dichloroethene [CAS:156-60-5] ; 1,2-Dichloropropane [CAS:78-87-5] ; 1,3-Dichloropropane [CAS:142-28-9] ; 2,2-Dichloropropane [CAS:594-20-7] ; 1,1-Dichloropropene [CAS:563-58-6] ; cis-1,3-Dichloropropene [CAS:10061-01-5] ; trans-1,3-Dichloropropene [CAS:10061-02-6] ; Ethylbenzene [CAS:100-41-4] ; Hexachloro-1,3-butadiene [CAS:87-68-3] ; Isopropylbenzene [CAS:98-82-8] ; 4-Isopropyltoluene [CAS:99-87-6] ; Dichloromethane [CAS:75-09-2] ; Naphthalene [CAS:91-20-3] ; n-Propylbenzene [CAS:103-65-1] ; Styrene [CAS:100-42-5] ; 1,1,1,2-Tetrachloroethane [CAS:630-20-6] ; 1,1,2,2-Tetrachloroethane [CAS:79-34-5] ; Tetrachloroethene [CAS:127-18-4] ; Toluene [CAS:108-88-3] ; 1,2,3-Trichlorobenzene [CAS:87-61-6] ; 1,2,4-Trichlorobenzene [CAS:120-82-1] ; 1,1,1-Trichloroethane [CAS:71-55-6] ; 1,1,2-Trichloroethane [CAS:79-00-5] ; Trichloroethene [CAS:79-01-6] ; 1,2,3-Trichloropropane [CAS:96-18-4] ; 1,2,4-Trimethylbenzene [CAS:95-63-6] ; 1,3,5-Trimethylbenzene [CAS:108-67-8] ; o-Xylene [CAS:95-47-6] ; m-Xylene [CAS:108-38-3] ; p-Xylene [CAS:106-42-3] in Methanol	Methanol	1 ml

## Miscellaneous Multi Component Standards

Product No	Explanation	Matrix	Volume
VM1.M.001	10 components phenol mixture reference standard. 500 ug/ml each of 2,4,6-trichlorophenol [CAS:88-06-2] ; 2-Chlorophenol [CAS:95-57-8] ; 2-Methylphenol [CAS:95-48-7] ; 2,4-Dichlorophenol [CAS:120-83-2] ; 2,4-Dimethylphenol [CAS:105-67-9] ; 2-Methyl-4,6-dinitrophenol [CAS:534-52-1] ; 2-Nitrophenol [CAS:88-75-5] ; 4-Methylphenol [CAS:106-44-5] ; Pentachlorophenol [CAS:87-86-5] ; Phenol [CAS:108-95-2] ; in Isopropanol	2-Propanol	1 ml
VM1.M.002	BTEX Standard Reference Solution 6 components: 200mg/l each of Benzene [CAS:71-43-2] ; Ethylbenzene [CAS:100-41-4] ; Toluene [CAS:108-88-3] ; o-Xylene [CAS:95-47-6] ; m-Xylene [CAS:108-38-3] ; p-Xylene [CAS:106-42-3] in Methanol	Methanol	1 ml

# CERTIFICATION

- > Purity of starting material shown in the certificates.
- > Preparation and certification informations are enclosed.
- > Traceability information is stated.
- > Results of stability and homogeneity studies are noted.
- > Expiration of the product is shown.
- > Barcode of solution is identified in the certificate.



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## CERTIFICATE OF ANALYSIS

### 1. COMPANY INFORMATIONS

Labsert is an international manufacturer of reference standard materials. All tests and analysis are carried out by ISO/IEC 17025 accredited Labsert's sub-contracted business partner Düzen Norwest Lab. (Turkak Accreditation No: AB-0375-T) and/or Labsert laboratory. Certificate of analysis is presented according to ISO 17034 requirements (Tur Cert. No: 20180718172822). Labsert is registered in reference material producer database (REMBIS) in TURKAK.

### 2. DESCRIPTION OF CERTIFIED REFERENCE MATERIAL (CRM)

Product Name	ICP-MS - Cu (Copper) Reference Standard Solution
Catalog Code	ICP.Cu1000_2NA
Lot Number	ICP.Cu1000-xxxxxx
Concentration	1000 mg/l
Starting Material	Cu(NO <sub>3</sub> ) <sub>2</sub> ·2.5H <sub>2</sub> O
*Starting Material Purity (%)	99.50
Matrix	2% HNO <sub>3</sub>
*Density (g/cm <sup>3</sup> at 25 °C)	0.9998

### 3. CERTIFIED VALUE / UNCERTAINTY

NIST SRM	Component	Symbol	Certified Value	Uncertainty ±	Calculation
3114	Copper	Cu	1000 mg/l	7,00 mg/l	Mean of the Results

### 4. PREPARATION AND CERTIFICATION INFORMATIONS

4.1. The certified value is obtained by gravimetric and volumetric preparations. It is confirmed against certified reference materials traceable to SI of NIST (National Institute of Standards and Technology), using one or two instrumental methods by ISO 17025 accredited laboratory which is sub-contracted business partner of Labsert. Certified value where one method is used, is the mean of individual results. Certified value where two methods are used, is the weighted mean of two results. The reported expanded uncertainty of measurement is calculated for a 95% confidence interval using a coverage factor of k = 2.

4.2. The reference standard solution is manufactured using a high-purity starting material. The matrix of standard solution is 18 MOhm deionized water and chromatography grade acid solution (if necessary).

### 5. TRACEABILITY STATEMENT

a. Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties (ISO VIM, 2nd ed., 1993, definition 6.10)

b. The measurement results are traceable to SI. All analytical balances are calibrated yearly by ISO 17025 accredited metrology service (TURKAK accreditation no: AB-0076-K) and are verified monthly by an in-house method using NIST traceable analytical weights (NIST Test No: 684/289871-17). Analytical balances are also weekly checked by using Class A laboratory glassware.

c. Automatic equipments are calibrated yearly verified by ISO 17025 accredited metrology service (TURKAK accreditation no: AB-0076-K) and are verified weekly by an in-house method.

### 6. INTENDED USE

This reference standard solution is for laboratory use only and it is intended for the calibration of analytical instruments such as Ion Chromatography, HPLC, UV/VIS, MS, ICP. This reference standard solution is also intended for validation of analytical methods, detection limit and linearity studies, preparation of "working reference samples". This statement is not intended to restrict the use for other purposes.

\* These values are not certified

### 7. INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

#### 7.1. Stability, Storage and Handling

This certified reference material is used with a guaranteed stability until ± 0.5% of the certified concentration within its shelf life. For the guaranteed stability, keep it in its original packaging, tightly capped when it is not in use and store at 20 ± 4 °C. Do not pipette from the container. Do not return portions removed from pipetting to container.

#### 8. HAZARDOUS INFORMATION

Please refer to Safety Data Sheet (SDS) for hazardous information regarding this certified reference material.

#### 9. HOMOGENEITY

This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. To achieve the sufficient homogeneity, please mix the sample slowly by inversion while it is capped.

#### 10. EXPIRATION INFORMATIONS

The expiration date is guaranteed to be valid when this certified reference material is kept in original unopened bottle and aluminized bag according to the instructions in article 7.1. Recommended period of use should not exceed 6 months from the date of opening.

Certification Date: 6.07.2019

Retest Date:

Expiration Time: 24 Months

Expiration Date: 07.2021

#### 11. NAMES OF CERTIFYING OFFICERS

Prepared By:

Controlled By:

CoA Barcode: 410005150125



Reference Points  
for Laboratories



# PURCHASING PROCESS

## Quotation and Ordering

We do not sell our products on our web site directly as e-commerce trading (Credit card, money transfer, online payment etc.). Regarding international order progress, you have to get the quotation first to see the total cost (Including shipment cost, packaging cost etc.) before legal payment. To get an exact quotation:

1. Specify the products your interested in.
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3. If a local distributor is not appointed for your region on our web site, you can contact us directly via e-mail: [global@labsert.com](mailto:global@labsert.com)
4. You can send us your list regarding requested products, specifications and quantities.
5. You get the final quotation as soon as possible. Final quotation includes total price, additional costs and payment options.

Prices are in US dollars or Turkish Lira and are subject to change without notice. Orders may be placed via the telephone, fax, mail, or web site. All orders must clearly indicate the customer telephone number, fax number, complete billing address, complete shipping address, catalog numbers, product names, quantity ordered and price. Customers are able to pay via credit card or bank transfer on our web site. Payment must be done to start the purchasing process.

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# Labsert®

Chemical Reference Standards

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