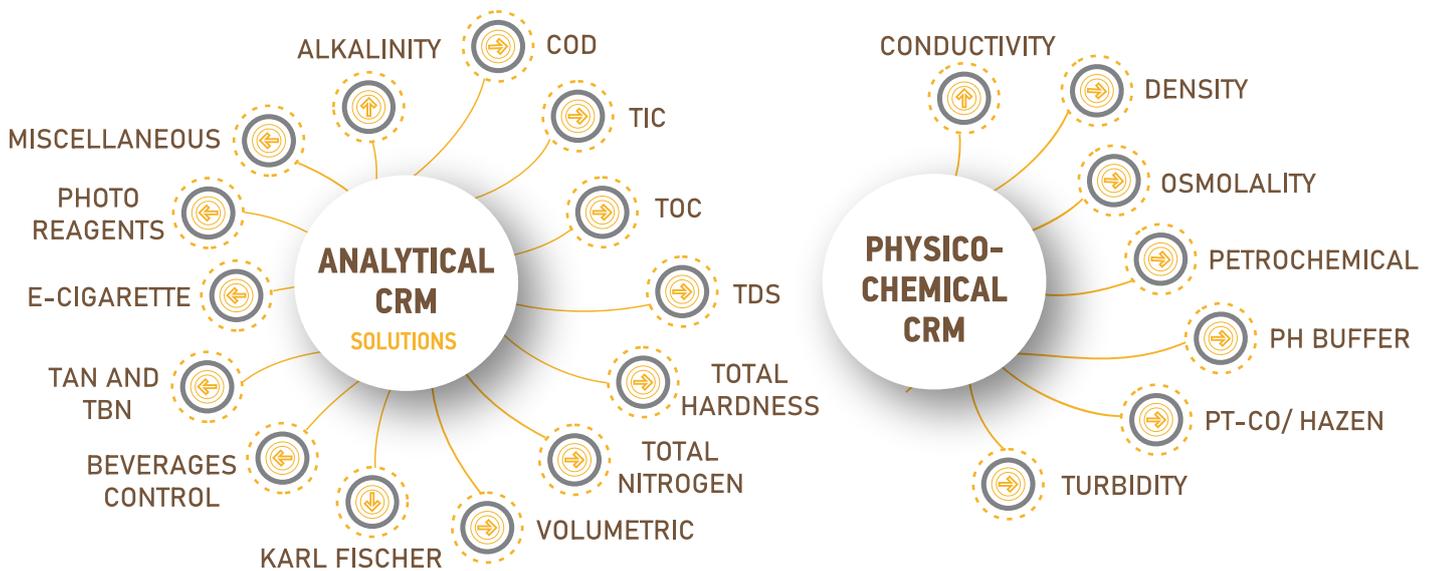


ANALYTICAL AND PHYSICO-CHEMICAL CRM

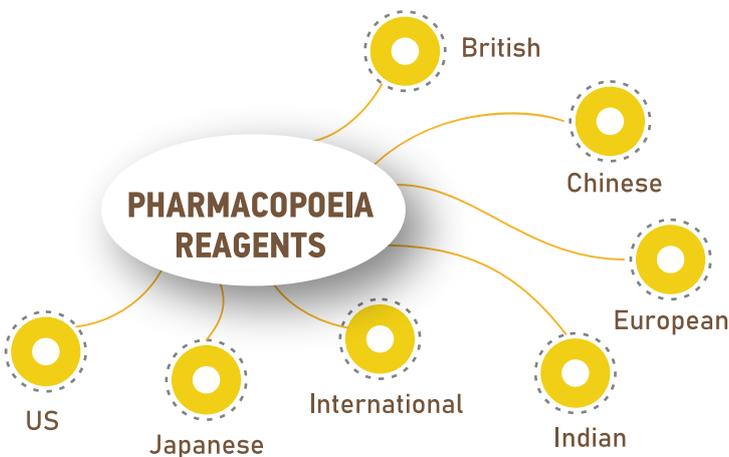


PRODUCT PORTFOLIO

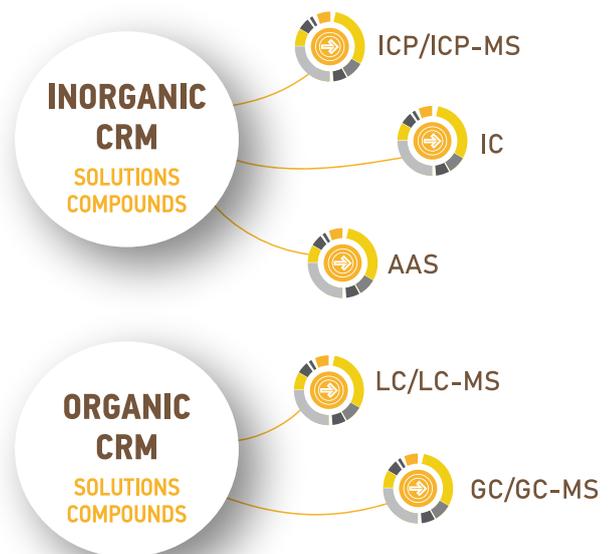
Decades of experience are brought in the production of certified reference materials to various analytical techniques. **CPAchem** continuously expanded its portfolio adding new product groups each year.



CPAchem is the only producer in the world providing products prepared according to seven different pharmacopoeas.



Apart from the above products **CPAchem** produces Inorganic and Organic Certified Reference materials.



CUSTOM PRODUCTS

CPAchem is the world leader in production of Custom-made standards. Nowadays more than 7500 laboratories in more than 100 countries worldwide use our standards. The custom-made standards are prepared to exactly match clients' needs and give them opportunities to quickly achieve their goals.

Cost-effective solutions



Short lead time for preparation



2-5 business days delivery



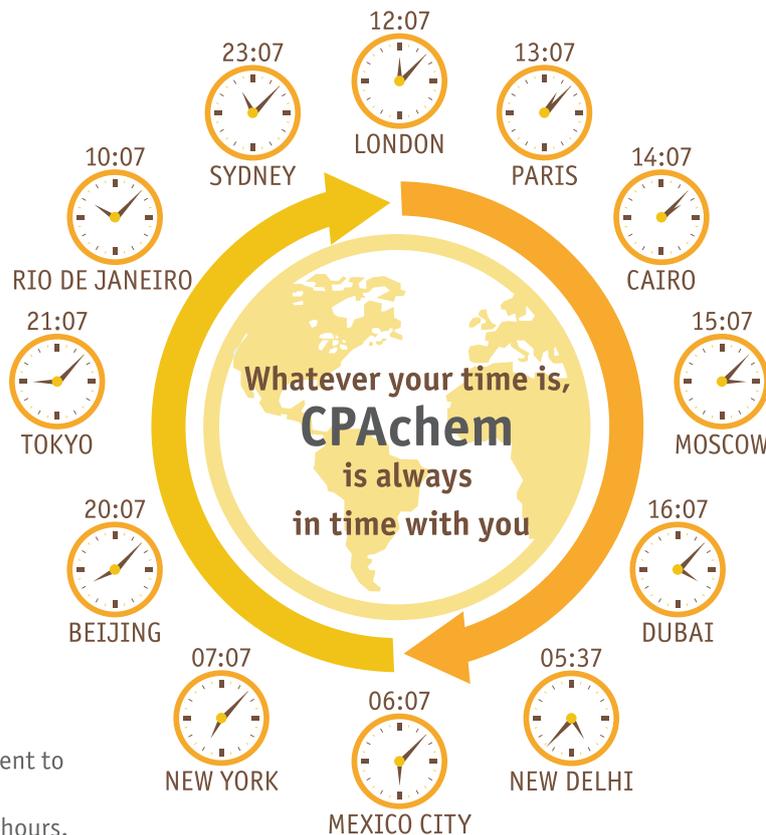
24 hour Emergency orders



TECHNOLOGY

CPAchem relies mainly on a very knowledgeable and creative team of chemists who together with software engineers developed unique Computer-Aided Manufacturing software which performs and controls the whole production process. The company has been constantly investing in high-tech apparatuses.

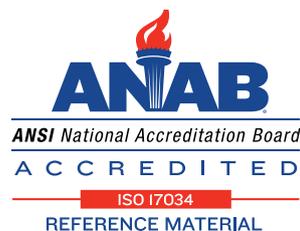
All these guarantee that **CPAchem** is always in time with its customers.



All customer inquiries sent to sales@cpachem.com are answered within 24 hours.

ACCREDITATION AND QUALITY

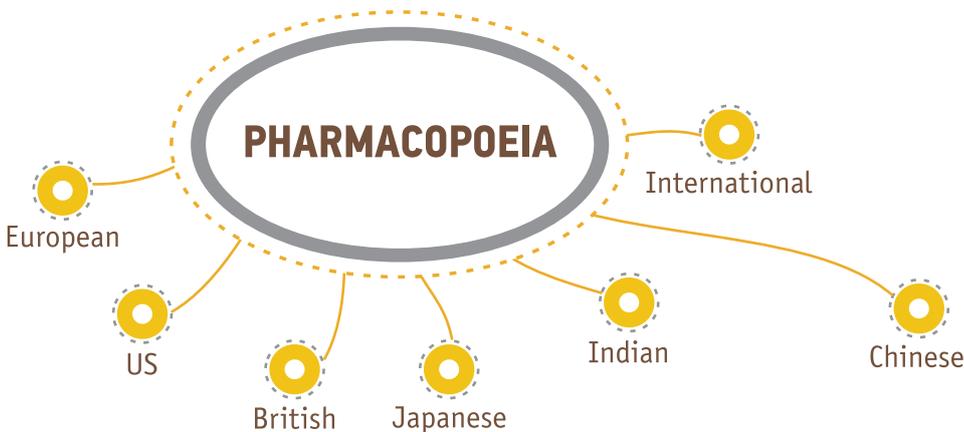
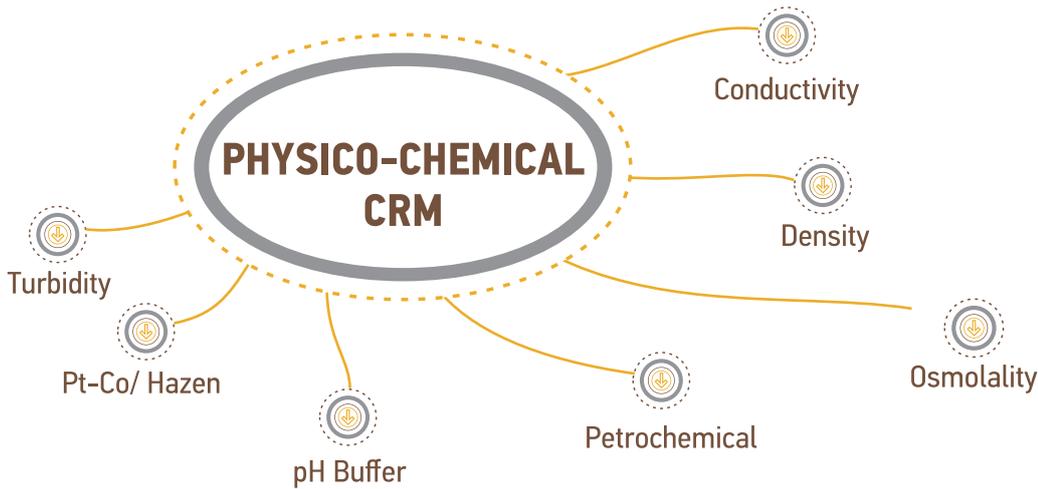
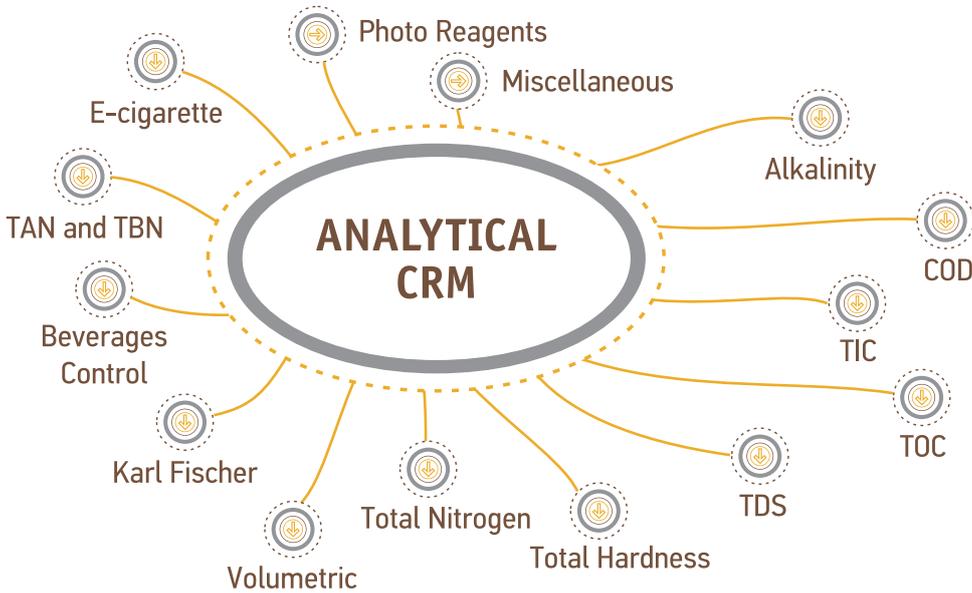
CPAchem has the highest achievable quality level for reference material producers with one of the broadest accreditation scopes in the world.



The main priority of **CPAchem's** management is to guarantee the best professional practice and quality throughout all stages of the production process, storage and distribution. The biggest proof for the quality of our products is that the percentage of valid claims has always been kept below 0.3%.

BROWSE PRODUCTS AND PRICES

As CPChem has been constantly adding products to its portfolio, browse the actual products and prices at www.cpachem.com

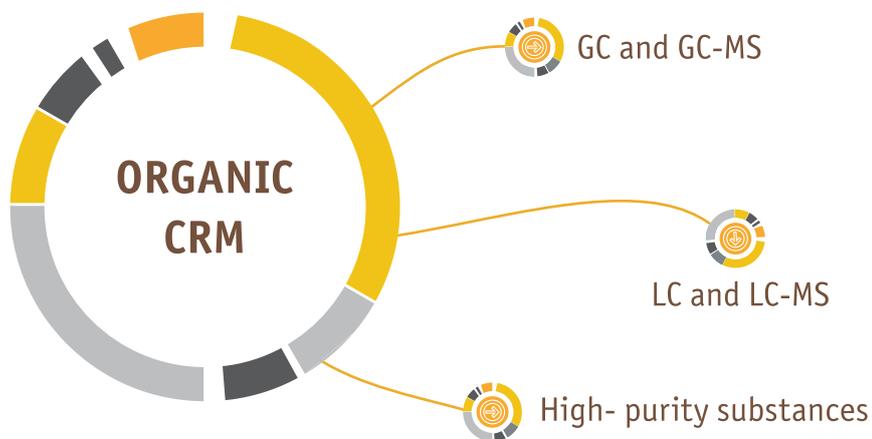
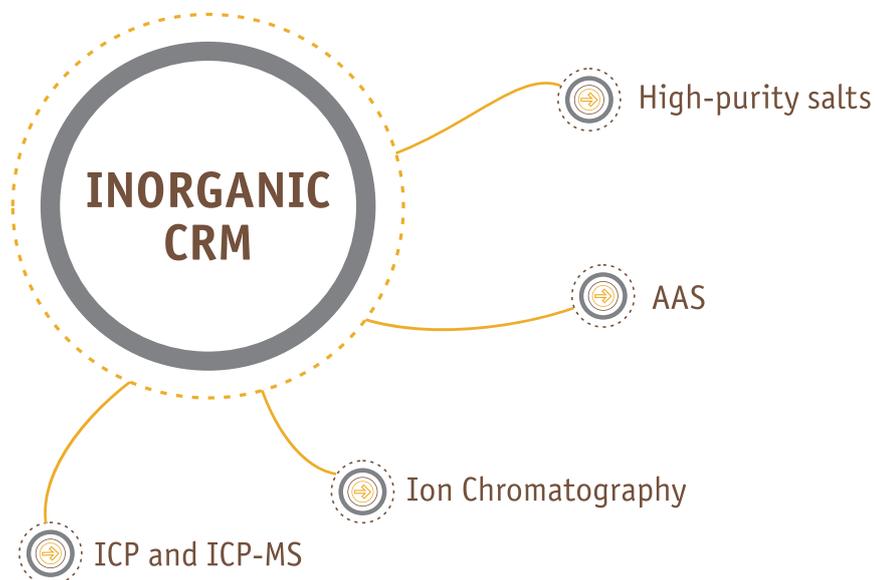


**CUSTOM ANALYTICAL PRODUCTS
INQUIRIES**



BROWSE PRODUCTS AND PRICES

As **CPAchem** has been constantly adding products to its portfolio, browse the actual products and prices at www.cpachem.com



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ANALYTICAL CRM

Alkalinity CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Traceability to International System of Units from BAM. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
ALKC500.L1	Alkalinity, CaCO ₃ 500 mg/L Calibration Standard	100	ml
ALKC500.L5	Alkalinity, CaCO ₃ 500 mg/L Calibration Standard	500	ml
ALKC1000.L1	Alkalinity, CaCO ₃ 1000 mg/L Calibration Standard	100	ml
ALKC1000.L5	Alkalinity, CaCO ₃ 1000 mg/L Calibration Standard	500	ml

Chemical Oxygen Demand (COD) CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Traceability to International System of Units from BAM. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35. The certified value is obtained by a weighted mean of the results of two independent calibration methods: Classical Volumetric and Instrumental (digestion of the chemically bonded organic carbon in the presence of a chemical oxidant and subsequent absorption measurement at 430 nm, using a spectrophotometer).

Ref. Number	Description	Volume	Msr
COD20.L1	Chemical Oxygen Demand COD 20 mg/l Calibration Standard	100	ml
COD20.L5	Chemical Oxygen Demand COD 20 mg/l Calibration Standard	500	ml
COD50.L1	Chemical Oxygen Demand COD 50 mg/l Calibration Standard	100	ml
COD50.L5	Chemical Oxygen Demand COD 50 mg/l Calibration Standard	500	ml
COD100.L1	Chemical Oxygen Demand COD 100 mg/l Calibration Standard	100	ml
COD100.L5	Chemical Oxygen Demand COD 100 mg/l Calibration Standard	500	ml
COD200.L1	Chemical Oxygen Demand COD 200 mg/l Calibration Standard	100	ml
COD200.L5	Chemical Oxygen Demand COD 200 mg/l Calibration Standard	500	ml
COD300.L1	Chemical Oxygen Demand COD 300 mg/l Calibration Standard	100	ml
COD300.L5	Chemical Oxygen Demand COD 300 mg/l Calibration Standard	500	ml
COD400.L1	Chemical Oxygen Demand COD 400 mg/l Calibration Standard	100	ml
COD400.L5	Chemical Oxygen Demand COD 400 mg/l Calibration Standard	500	ml
COD500.L1	Chemical Oxygen Demand COD 500 mg/l Calibration Standard	100	ml
COD500.L5	Chemical Oxygen Demand COD 500 mg/l Calibration Standard	500	ml
COD1000.L1	Chemical Oxygen Demand COD 1000 mg/l Calibration Standard	100	ml
COD1000.L5	Chemical Oxygen Demand COD 1000 mg/l Calibration Standard	500	ml
COD2000.L1	Chemical Oxygen Demand COD 2000 mg/l Calibration Standard	100	ml
COD2000.L5	Chemical Oxygen Demand COD 2000 mg/l Calibration Standard	500	ml
COD5000.L1	Chemical Oxygen Demand COD 5000 mg/l Calibration Standard	100	ml
COD5000.L5	Chemical Oxygen Demand COD 5000 mg/l Calibration Standard	500	ml
COD10000.L1	Chemical Oxygen Demand COD 10000 mg/l Calibration Standard	100	ml
COD10000.L5	Chemical Oxygen Demand COD 10000 mg/l Calibration Standard	500	ml

TOTAL INORGANIC CARBON (TIC) CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Traceability to International System of Units from BAM. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
TIC1000.L1	TIC Standard Solution 1000mg/l as sodium carbonate (standard solution acc. to EN 1484)	100	ml
TIC1000.L5	TIC Standard Solution 1000mg/l as sodium carbonate (standard solution acc. to EN 1484)	500	ml
TIC10000.L1	TIC Standard Solution 10000mg/l as sodium carbonate	100	ml
TIC10000.L5	TIC Standard Solution 10000mg/l as sodium carbonate	500	ml

Total Organic Carbon (TOC) CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Traceability to International System of Units from BAM. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
TOCW2244	TOC water for Total organic carbon (TOC) determination acc. to Ph Eur 2.2.44	1000	ml
TOC5.L1	TOC Standard Solution 5 mg/l	100	ml
TOC5.L5	TOC Standard Solution 5 mg/l	500	ml
TOC10.L1	TOC Standard Solution 10 mg/l	100	ml
TOC10.L5	TOC Standard Solution 10 mg/l	500	ml
TOC50.L1	TOC Standard Solution 50 mg/l	100	ml
TOC50.L5	TOC Standard Solution 50 mg/l	500	ml
TOC100.L1	TOC Standard Solution 100 mg/l (standard solution acc. to EN 1484)	100	ml
TOC100.L5	TOC Standard Solution 100 mg/l (standard solution acc. to EN 1484)	500	ml
TOC200.L1	TOC Standard Solution 200 mg/l	100	ml
TOC200.L5	TOC Standard Solution 200 mg/l	500	ml
TOC500.L1	TOC Standard Solution 500 mg/l	100	ml
TOC500.L5	TOC Standard Solution 500 mg/l	500	ml
TOC1000.L1	TOC Standard Solution 1000 mg/l (stock solution acc. to EN 1484)	100	ml
TOC1000.L5	TOC Standard Solution 1000 mg/l (stock solution acc. to EN 1484)	500	ml
TOC2000.L1	TOC Standard Solution 2000 mg/l	100	ml
TOC2000.L5	TOC Standard Solution 2000 mg/l	500	ml

Total Dissolved Solids (TDS) CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025.

Metrological traceability to NIST. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
TDS10.L1	Total Dissolved Solids (as NaCl) 10mg/l	100	ml
TDS10.L5	Total Dissolved Solids (as NaCl) 10mg/l	500	ml
TDS50.L1	Total Dissolved Solids (as NaCl) 50mg/l	100	ml
TDS50.L5	Total Dissolved Solids (as NaCl) 50mg/l	500	ml
TDS100.L1	Total Dissolved Solids (as NaCl) 100mg/l	100	ml
TDS100.L5	Total Dissolved Solids (as NaCl) 100mg/l	500	ml
TDS500.L1	Total Dissolved Solids (as NaCl) 500mg/l	100	ml
TDS500.L5	Total Dissolved Solids (as NaCl) 500mg/l	500	ml
TDS1000.L1	Total Dissolved Solids (as NaCl) 1000mg/l	100	ml
TDS1000.L5	Total Dissolved Solids (as NaCl) 1000mg/l	500	ml
TDS1500.L1	Total Dissolved Solids (as NaCl) 1500mg/l	100	ml
TDS1500.L5	Total Dissolved Solids (as NaCl) 1500mg/l	500	ml
TDS2000.L1	Total Dissolved Solids (as NaCl) 2000mg/l	100	ml
TDS2000.L5	Total Dissolved Solids (as NaCl) 2000mg/l	500	ml

Total Hardness CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025.

Metrological traceability to NIST. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
HRDN1000.L1	Total Hardness 1000 mg/L CaCO ₃ Calibration Standard	100	ml
HRDN1000.L5	Total Hardness 1000 mg/L CaCO ₃ Calibration Standard	500	ml

Total Nitrogen CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Metrological traceability to NIST. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35. The standards are used for photometric applications acc to EN 25663 (ISO 5663) and ISO 7150.

Ref. Number	Description	Volume	Msr
TN0100.L1	Total Nitrogen Standard (100 mg/l) - for photometric applications acc to EN 25663 (ISO 5663) and ISO 7150	100	ml
TN1000.L1	Total Nitrogen Standard (1000 mg/l) - for photometric applications acc to EN 25663 (ISO 5663) and ISO 7150	100	ml

Volumetric CRM

CRM Volumetric Salts

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Traceability to International System of Units from BAM. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
VS1017.60G	Benzoic acid - Certified Reference Material for standardization of volumetric solutions	60	g
VS1271.50G	Calcium Carbonate - Certified Reference Material for standardization of volumetric solutions	50	g
VS1524.60G	di-Sodium Oxalate - Certified Reference Material for standardization of volumetric solutions	60	g
VS66332.80G	Iron(II)ethylenediammonium sulfate - Certified Reference Material for standardization of volumetric solutions	80	g
VS1442.50G	Potassium Bromate - Certified Reference Material for standardization of volumetric solutions	50	g
VS1441.80G	Potassium Dichromate - Certified Reference Material for standardization of volumetric solutions	80	g
VS3650.80G	Potassium Hydrogen Phthalate - Certified Reference Material for standardization of volumetric solutions	80	g
VS1458.100G	Potassium Iodate - Certified Reference Material for standardization of volumetric solutions	100	g
VS1503.80G	Sodium Carbonate - Certified Reference Material for standardization of volumetric solutions	80	g
VS1508.80G	Sodium Chloride - Certified Reference Material for standardization of volumetric solutions	80	g
VS1060.80G	Tris(hydroxymethyl) aminomethane - Certified Reference Material for standardization of volumetric solutions	80	g
VS1585.100G	Zinc - Certified Reference Material for standardization of volumetric solutions	100	g

CRM Volumetric Solutions Ready for use, Certified VS

Titration is the oldest, but still the most precise procedure in chemical analysis. However, such reliable analyses require accurately adjusted volumetric solutions. The analytical VS are CRM's under ISO 17034 and ISO/IEC 17025. Metrological traceability to NIST or BAM.

Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
Z10141000	Acetic Acid 0.1M (0.1N)	500	ml
Z10141000.1L	Acetic Acid 0.1M (0.1N)	1000	ml
Z10144028	Acetic Acid 1M (1N)	500	ml
Z10144028.1L	Acetic Acid 1M (1N)	1000	ml
Z12271002	Ammonia (Ammonium Hydroxide) 0.1M (0.1N)	500	ml
Z12271002.1L	Ammonia (Ammonium Hydroxide) 0.1M (0.1N)	1000	ml

Ref. Number	Description	Volume	Msr
Z12351005	Ammonium Thiocyanate 0.1M (0.1N)	500	ml
Z12351005.1L	Ammonium Thiocyanate 0.1M (0.1N)	1000	ml
Z12461007	Barium Chloride 0.05M (0.1N)	500	ml
Z12461007.1L	Barium Chloride 0.05M (0.1N)	1000	ml
Z16001011	Bromine - Bromate/Bromide 0.05M (0.1N)	500	ml
Z16001011.1L	Bromine - Bromate/Bromide 0.05M (0.1N)	1000	ml
Z12721013	Calcium Chloride 0.01M (0.02N)	500	ml
Z12721013.1L	Calcium Chloride 0.01M (0.02N)	1000	ml
Z12721014	Calcium Chloride 0.02M (0.04N)	500	ml
Z12721014.1L	Calcium Chloride 0.02M (0.04N)	1000	ml
Z12721015	Calcium Chloride 0.5M (1N)	500	ml
Z12721015.1L	Calcium Chloride 0.5M (1N)	1000	ml
Z13071018	Copper (II) Sulphate 0.1M (0.1N)	500	ml
Z13071018.1L	Copper (II) Sulphate 0.1M (0.1N)	1000	ml
Z10311018	EDTA (disodium salt) 0.005M (0.01N)	500	ml
Z10311018.1L	EDTA (disodium salt) 0.005M (0.01N)	1000	ml
Z10311019	EDTA (disodium salt) 0.01M (0.02N)	500	ml
Z10311019.1L	EDTA (disodium salt) 0.01M (0.02N)	1000	ml
Z10311020	EDTA (disodium salt) 0.1M (0.2N)	500	ml
Z10311020.1L	EDTA (disodium salt) 0.1M (0.2N)	1000	ml
Z10311214	EDTA 0.050M (0.100N)	500	ml
Z10311214.1L	EDTA 0.050M (0.100N)	1000	ml
Z13411228	Hydrochloric Acid 0.01 M (0.01N)	500	ml
Z13411228.1L	Hydrochloric Acid 0.01 M (0.01N)	1000	ml
Z13414031	Hydrochloric Acid 0.02M (0.02N)	500	ml
Z13414031.1L	Hydrochloric Acid 0.02M (0.02N)	1000	ml
Z13411022	Hydrochloric Acid 0.05M (0.05N)	500	ml
Z13411022.1L	Hydrochloric Acid 0.05M (0.05N)	1000	ml
Z13411023	Hydrochloric Acid 0.1M (0.1N)	500	ml
Z13411023.1L	Hydrochloric Acid 0.1M (0.1N)	1000	ml
Z13411025	Hydrochloric Acid 0.2M (0.2N)	500	ml
Z13411025.1L	Hydrochloric Acid 0.2M (0.2N)	1000	ml
Z13411024	Hydrochloric Acid 0.25M (0.25N)	500	ml
Z13411024.1L	Hydrochloric Acid 0.25M (0.25N)	1000	ml
Z13411026	Hydrochloric Acid 0.5M (0.5N)	500	ml
Z13411026.1L	Hydrochloric Acid 0.5M (0.5N)	1000	ml
Z13411027	Hydrochloric Acid 1M (1N)	500	ml
Z13411027.1L	Hydrochloric Acid 1M (1N)	1000	ml
Z13411027.5L	Hydrochloric Acid 1M (1N)	5000	ml
Z13411028	Hydrochloric Acid 2M (2N)	500	ml
Z13411028.1L	Hydrochloric Acid 2M (2N)	1000	ml
Z13411029	Hydrochloric Acid 5M (5N)	500	ml
Z13411029.1L	Hydrochloric Acid 5M (5N)	1000	ml
Z13411030	Hydrochloric Acid 6M (6N)	500	ml
Z13411030.1L	Hydrochloric Acid 6M (6N)	1000	ml
Z13504058	Iodine 0.005M (0.01N)	500	ml
Z13504058.1L	Iodine 0.005M (0.01N)	1000	ml
Z13504057	Iodine 0.01M (0.02N)	500	ml

Ref. Number	Description	Volume	Msr
Z13504057.1L	Iodine 0.01M (0.02N)	1000	ml
Z13501034	Iodine 0.05M (0.1N)	500	ml
Z13501034.1L	Iodine 0.05M (0.1N)	1000	ml
Z13504166	Iodine 0.1M (0.2 N)	500	ml
Z13504166.1L	Iodine 0.1M (0.2 N)	1000	ml
Z13501035	Iodine 0.5M (1N)	500	ml
Z13501035.1L	Iodine 0.5M (1N)	1000	ml
Z13711037	Lead (II) Nitrate 0.01M (0.02N)	500	ml
Z13711037.1L	Lead (II) Nitrate 0.01M (0.02N)	1000	ml
Z14031040	Mercury (I) (Mercurous) Nitrate 0.1M (0.1N)	500	ml
Z14031040.1L	Mercury (I) (Mercurous) Nitrate 0.1M (0.1N)	1000	ml
Z14224048	Nitric Acid 0.1M (0.1N)	500	ml
Z14224048.1L	Nitric Acid 0.1M (0.1N)	1000	ml
Z14221044	Nitric Acid 1M (1N)	500	ml
Z14221044.1L	Nitric Acid 1M (1N)	1000	ml
Z14221045	Nitric Acid 2M (2N)	500	ml
Z14221045.1L	Nitric Acid 2M (2N)	1000	ml
Z14221046	Nitric Acid 4M (4N)	500	ml
Z14221046.1L	Nitric Acid 4M (4N)	1000	ml
Z14224218	Nitric Acid 5M (5N)	500	ml
Z14224218.1L	Nitric Acid 5M (5N)	1000	ml
Z14221047	Nitric Acid 8M (8N)	500	ml
Z14221047.1L	Nitric Acid 8M (8N)	1000	ml
Z14291049	Oxalic Acid 0.05M (0.1N)	500	ml
Z14291049.1L	Oxalic Acid 0.05M (0.1N)	1000	ml
Z14291050	Oxalic Acid 0.5M (1N)	500	ml
Z14291050.1L	Oxalic Acid 0.5M (1N)	1000	ml
Z14331051	Perchloric Acid 0.1M (0.1N) in Water	500	ml
Z14331051.1L	Perchloric Acid 0.1M (0.1N) in Water	1000	ml
Z14331052	Perchloric Acid 1M (1N) in Water	500	ml
Z14331052.1L	Perchloric Acid 1M (1N) in Water	1000	ml
Z14421053	Potassium Bromate 1/60M (0.01667M) (0.1N)	500	ml
Z14421053.1L	Potassium Bromate 1/60M (0.01667M) (0.1N)	1000	ml
Z14464162	Potassium Chloride KCl 0.001M	500	ml
Z14464162.1L	Potassium Chloride KCl 0.001M	1000	ml
Z14464161	Potassium Chloride KCl 0.01M	500	ml
Z14464161.1L	Potassium Chloride KCl 0.01M	1000	ml
Z14461057	Potassium Chloride 1M (1N)	500	ml
Z14461057.1L	Potassium Chloride 1M (1N)	1000	ml
Z14464098	Potassium Chloride KCl 3 mol/l	250	ml
Z14471058	Potassium Chromate 1/30M (0.0333M)	500	ml
Z14471058.1L	Potassium Chromate 1/30M (0.0333M)	1000	ml
Z14411059	Potassium Dichromate 1/60M (0.0167M) (0.1N)	500	ml
Z14411059.1L	Potassium Dichromate 1/60M (0.0167M) (0.1N)	1000	ml
Z14411060	Potassium Dichromate 1/24M (0.0417M) (0.25N)	500	ml
Z14411060.1L	Potassium Dichromate 1/24M (0.0417M) (0.25N)	1000	ml
Z14411061	Potassium Dichromate 0.167M (1N)	500	ml
Z14411061.1L	Potassium Dichromate 0.167M (1N)	1000	ml

Ref. Number	Description	Volume	Msr
Z14651062	Potassium hydrogen phthalate 0.1M (0.1N)	500	ml
Z14651062.1L	Potassium hydrogen phthalate 0.1M (0.1N)	1000	ml
Z14571065	Potassium Hydroxide 0.1M (0.1N)	500	ml
Z14571065.1L	Potassium Hydroxide 0.1M (0.1N)	1000	ml
Z14571064	Potassium Hydroxide 0.1M (0.1N) in ethanol	500	ml
Z14571064.1L	Potassium Hydroxide 0.1M (0.1N) in ethanol	1000	ml
Z14571066	Potassium Hydroxide 0.5M (0.5N)	500	ml
Z14571066.1L	Potassium Hydroxide 0.5M (0.5N)	1000	ml
Z14571070	Potassium Hydroxide 0.5M (0.5N) in ethanol	500	ml
Z14571070.1L	Potassium Hydroxide 0.5M (0.5N) in ethanol	1000	ml
Z14571069	Potassium Hydroxide 1M (1N)	500	ml
Z14571069.1L	Potassium Hydroxide 1M (1N)	1000	ml
Z14581071	Potassium Iodate 0.01667M (0.1N)	500	ml
Z14581071.1L	Potassium Iodate 0.01667M (0.1N)	1000	ml
Z14581072	Potassium Iodate 0.05M (0.3N)	500	ml
Z14581072.1L	Potassium Iodate 0.05M (0.3N)	1000	ml
Z14591073	Potassium Iodide 0.1M (0.1N)	500	ml
Z14591073.1L	Potassium Iodide 0.1M (0.1N)	1000	ml
Z14624145	Potassium nitrate 1M	500	ml
Z14624145.1L	Potassium nitrate 1M	1000	ml
Z02564114.1L	Potassium Permanganate 0.002M (0.01N)	1000	ml
Z14641076	Potassium Permanganate 0.01M (0.05N)	500	ml
Z14641076.1L	Potassium Permanganate 0.01M (0.05N)	1000	ml
Z14641077	Potassium Permanganate 0.02M (0.1N)	500	ml
Z14641077.1L	Potassium Permanganate 0.02M (0.1N)	1000	ml
Z14641078	Potassium Permanganate 0.05M (0.25N)	500	ml
Z14641078.1L	Potassium Permanganate 0.05M (0.25N)	1000	ml
Z14641079	Potassium Permanganate 0.2M (1N)	500	ml
Z14641079.1L	Potassium Permanganate 0.2M (1N)	1000	ml
Z16031080	Potassium Thiocyanate 0.1M (0.1N)	500	ml
Z16031080.1L	Potassium Thiocyanate 0.1M (0.1N)	1000	ml
Z14941081	Silver Nitrate 0.01M (0.01N)	500	ml
Z14941081.1L	Silver Nitrate 0.01M (0.01N)	1000	ml
Z14941082	Silver Nitrate 0.05M (0.05N)	500	ml
Z14941082.1L	Silver Nitrate 0.05M (0.05N)	1000	ml
Z14941083	Silver Nitrate 0.1M (0.1N)	500	ml
Z14941083.1L	Silver Nitrate 0.1M (0.1N)	1000	ml
Z15031089	Sodium Carbonate 0.05M (0.1N)	500	ml
Z15031089.1L	Sodium Carbonate 0.05M (0.1N)	1000	ml
Z15031090	Sodium Carbonate 0.5M (1N)	500	ml
Z15031090.1L	Sodium Carbonate 0.5M (1N)	1000	ml
Z15081092	Sodium Chloride 0.1M (0.1N)	500	ml
Z15081092.1L	Sodium Chloride 0.1M (0.1N)	1000	ml
Z15081093	Sodium Chloride 1M (1N)	500	ml
Z15081093.1L	Sodium Chloride 1M (1N)	1000	ml
Z15171207	Sodium Hydroxide 0.01M (0.01N)	500	ml
Z15171207.1L	Sodium Hydroxide 0.01M (0.01N)	1000	ml
Z15171094	Sodium Hydroxide 0.02M (0.02N)	500	ml

Ref. Number	Description	Volume	Msr
Z15171094.1L	Sodium Hydroxide 0.02M (0.02N)	1000	ml
Z15171095	Sodium Hydroxide 0.1M (0.1N)	500	ml
Z15171095.1L	Sodium Hydroxide 0.1M (0.1N)	1000	ml
Z15171096	Sodium Hydroxide 0.25M (0.25N)	1000	ml
Z15171098	Sodium Hydroxide 0.5M (0.5N)	500	ml
Z15171098.1L	Sodium Hydroxide 0.5M (0.5N)	1000	ml
Z15171099	Sodium Hydroxide 1M (1N)	500	ml
Z15171099.1L	Sodium Hydroxide 1M (1N)	1000	ml
Z15171100	Sodium Hydroxide 2M (2N)	500	ml
Z15171100.1L	Sodium Hydroxide 2M (2N)	1000	ml
Z15171101	Sodium Hydroxide 4M (4N)	500	ml
Z15171101.1L	Sodium Hydroxide 4M (4N)	1000	ml
Z15231102	Sodium Nitrite 0.1M (0.2N)	500	ml
Z15231102.1L	Sodium Nitrite 0.1M (0.2N)	1000	ml
Z15241107	Sodium Oxalate 0.05M (0.1N)	500	ml
Z15241107.1L	Sodium Oxalate 0.05M (0.1N)	1000	ml
Z15321109	Sodium Thiosulphate 0.01M (0.01N)	500	ml
Z15321109.1L	Sodium Thiosulphate 0.01M (0.01N)	1000	ml
Z15321110	Sodium Thiosulphate 0.05M (0.05N)	500	ml
Z15321110.1L	Sodium Thiosulphate 0.05M (0.05N)	1000	ml
Z15321111	Sodium Thiosulphate 0.1M (0.1N)	500	ml
Z15321111.1L	Sodium Thiosulphate 0.1M (0.1N)	1000	ml
Z15321112	Sodium Thiosulphate 1M (1N)	500	ml
Z15321112.1L	Sodium Thiosulphate 1M (1N)	1000	ml
Z15451113	Sulphuric Acid 0.05M (0.1N)	500	ml
Z15451113.1L	Sulphuric Acid 0.05M (0.1N)	1000	ml
Z15451114	Sulphuric Acid 0.1M (0.2N)	500	ml
Z15451114.1L	Sulphuric Acid 0.1M (0.2N)	1000	ml
Z15451117	Sulphuric Acid 0.5M (1N)	500	ml
Z15451117.1L	Sulphuric Acid 0.5M (1N)	1000	ml
Z15451116	Sulphuric Acid 1M (2N)	500	ml
Z15451116.1L	Sulphuric Acid 1M (2N)	1000	ml
Z15451118	Sulphuric Acid 2.5M (5N)	500	ml
Z15451118.1L	Sulphuric Acid 2.5M (5N)	1000	ml
Z15451119	Sulphuric Acid 5M (10N)	500	ml
Z15451119.1L	Sulphuric Acid 5M (10N)	1000	ml
Z15871120	Zinc Chloride 0.1M (0.1N)	500	ml
Z15871120.1L	Zinc Chloride 0.1M (0.1N)	1000	ml
Z16051124	Zinc Sulphate 0.02 M (0.02 N)	500	ml
Z16051124.1L	Zinc Sulphate 0.02 M (0.02 N)	1000	ml
Z16051123	Zinc Sulphate 0.1M (0.1N)	500	ml
Z16051123.1L	Zinc Sulphate 0.1M (0.1N)	1000	ml

Volumetric Solutions - Ready to use, Noncertified VS

Traceability to BAM

Ref. Number	Description	Volume	Msr
NZ10141000	Acetic Acid 0.1M (0.1N)Noncertified	1000	ml
NZ12351006	Ammonium Thiocyanate 1M (1N)Noncertified	1000	ml
NZ12491009	Benzethonium chloride 0.004M (0.004N)Noncertified	1000	ml
NZ13071018	Copper (II) Sulphate 0.1M (0.1N)Noncertified	1000	ml
NZ10311019	EDTA (disodium salt) 0.01M (0.02N)Noncertified	1000	ml
NZ10311214	EDTA 0.050M (0.100N)Noncertified	1000	ml
NZ13411022	Hydrochloric Acid 0.05M (0.05N)Noncertified	1000	ml
NZ13411023	Hydrochloric Acid 0.1M (0.1N)Noncertified	1000	ml
NZ13411025	Hydrochloric Acid 0.2M (0.2N)Noncertified	1000	ml
NZ13411027	Hydrochloric Acid 1M (1N)Noncertified	1000	ml
NZ13411028	Hydrochloric Acid 2M (2N)Noncertified	1000	ml
NZ13411029	Hydrochloric Acid 5M (5N)Noncertified	1000	ml
NZ13411030	Hydrochloric Acid 6M (6N)Noncertified	1000	ml
NZ13501034	Iodine 0.05M (0.1N)Noncertified	1000	ml
NZ13711037	Lead (II) Nitrate 0.01M (0.02N)Noncertified	1000	ml
NZ14031040	Mercury (I) (Mercurous) Nitrate 0.1M (0.1N)Noncertified	1000	ml
NZ14221045	Nitric Acid 2M (2N)Noncertified	1000	ml
NZ14291049	Oxalic Acid 0.05M (0.1N)Noncertified	1000	ml
NZ14331051	Perchloric Acid in Water 0.1M (0.1N) Noncertified	1000	ml
NZ14331052	Perchloric Acid in Water 1M (1N)Noncertified	1000	ml
NZ14411059	Potassium Dichromate 1/60M (0.0167M) (0.1N)Noncertified	1000	ml
NZ14571064	Potassium Hydroxide in ethanol 0.1M (0.1N)Noncertified	1000	ml
NZ14571066	Potassium Hydroxide 0.5M (0.5N)Noncertified	1000	ml
NZ14571069	Potassium Hydroxide 1M (1N)Noncertified	1000	ml
NZ14641076	Potassium Permanganate 0.01M (0.05N)Noncertified	1000	ml
NZ14641079	Potassium Permanganate 0.2M (1N)Noncertified	1000	ml
NZ15081092	Sodium Chloride 0.1M (0.1N)Noncertified	1000	ml
NZ15171207	Sodium Hydroxide 0.01M (0.01N) Noncertified	1000	ml
NZ15171094	Sodium Hydroxide 0.02M (0.02N)Noncertified	1000	ml
NZ15171095	Sodium Hydroxide 0.1M (0.1N)Noncertified	1000	ml
NZ15171098	Sodium Hydroxide 0.5M (0.5N)Noncertified	1000	ml
NZ15171099	Sodium Hydroxide 1M (1N)Noncertified	1000	ml
NZ15171100	Sodium Hydroxide 2M (2N)Noncertified	1000	ml
NZ15171101	Sodium Hydroxide 4M (4N)Noncertified	1000	ml
NZ15321111	Sodium Thiosulphate 0.1M (0.1N)Noncertified	1000	ml
NZ15451113.1L	Sulphuric Acid 0.05M (0.1N)Noncertified	1000	ml
NZ15451114	Sulphuric Acid 0.1M (0.2N)Noncertified	1000	ml
NZ15451117	Sulphuric Acid 0.5M (1N)Noncertified	1000	ml
NZ15451116	Sulphuric Acid 1M (2N)Noncertified	1000	ml
NZ15451119	Sulphuric Acid 5M (10N)Noncertified	1000	ml

Volumetric Solutions - Concentrated

Volumetric concentrates offer the convenience of prepared volumetric solutions with the benefits of reduced transportation costs and storage space. Concentrated VS are designed to be quantitatively transferred and brought to volume. Certificate of Analysis with actual contents, lot number, expiry date and traceability to International System of Units from BAM. Concentrated VS are provided in sealed bottles, easy to use, no ampoules to break, no need for pipetting. Just empty the bottle in a volumetric flask, rinse and complete to volume.

Ref. Number	Description	Volume	Msr
CC1227002	Ammonia - concentrate to make 1L 1M solution	100	ml
CC1031006	EDTA - concentrate to make 1L 0.01 M solution	100	ml
CC1031008	EDTA - concentrate to make 1L 0.05M solution	100	ml
CC1031005	EDTA - concentrate to make 1L 0.1M solution	100	ml
CC1341010	Hydrochloric acid - concentrate to make 1L 0.1M (0.1N) solution	100	ml
CC1341007	Hydrochloric acid - concentrate to make 1L 1M solution	100	ml
CC1350013	Iodine - concentrate to make 1L 0.005M (0.01 N) solution	100	ml
CC1350012	Iodine - concentrate to make 1L 0.025M (0.05 N) solution	100	ml
CC1350011	Iodine - concentrate to make 1L 0.05M (0.1N) solution	100	ml
CC1422014	Nitric acid - concentrate to make 1L 1M (1N) solution	100	ml
CC1422015	Nitric acid 0.1 M (0.1N) concentrated solution	100	ml
CC1430011	Potassium dichromate - concentrate to make 1L 1/60M (0.1N) solution	100	ml
CC14581071	Potassium iodate - concentrate to make 1L 1/60M (0.1N) solution	100	ml
CC1464016	Potassium permanganate concentrate to make 1L 1/50M (0.1N) KMnO ₄	100	ml
CC1494018	Silver nitrate - concentrate to make 1L 0.1M (0.1N) solution	100	ml
CC1517022	Sodium hydroxide - concentrate to make 1L 0.01M (0.01N) solution	100	ml
CC1517021	Sodium hydroxide - concentrate to make 1L 0.1M (0.1N) solution	100	ml
CC1517019	Sodium hydroxide - concentrate to make 1L 1M (1N) solution	100	ml
CC1532024	Sodium thiosulphate - concentrate to make 1L 0.01M (0.01N) solution	100	ml
CC1532023	Sodium thiosulphate - concentrate to make 1L 0.1M (0.1N) solution	100	ml
CC1545025	Sulfuric acid - concentrate to make 1L 0.5M (1N) solution	100	ml
CC1545026	Sulphuric acid - concentrate to make 1L 0.1N solution	100	ml

Karl Fischer CRM

These Standards are designed to determine water content in substances by Karl Fischer volumetric or coulometric determinations. These standards are CRM's under ISO 17034 and ISO/IEC 17025. Metrological traceability to International System of Units from NIST. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
KF001AC.40G	Karl Fischer coulometric Water Standard 0.01% (xylenes based) - 10 ampoules x 4g (1 g contains 0.10 mg H ₂ O)	10x4	g
KF001PC.40G	Karl Fischer coulometric Water Standard 0.01% (PC based) - 10 ampoules x 4g (1 g contains 0.10 mg H ₂ O)	10x4	g

Ref. Number	Description	Volume	Msr
KF01PGME.40G	Karl Fischer coulometric Water Standard 0.1%(1 g contains 1.0 mg H ₂ O)	10x4	g
KF01PGME.80G	Karl Fischer coulometric Water Standard 0.1%(1 g contains 1.0 mg H ₂ O)	10x8	g
KF1PGME.40G	Karl Fischer coulometric Water Standard 1%(1g contains 10mg H ₂ O)	10x4	g
KF1PGME.80G	Karl Fischer coulometric Water Standard 1%(1g contains 10mg H ₂ O)	10x8	g
KFV05STD.1L	Karl Fischer volumetric Water Standard - 0.5% (1ml Methanol contains 5mg H ₂ O)	1000	ml
KFV05STD.L25	Karl Fischer volumetric Water Standard - 0.5% (1ml Methanol contains 5mg H ₂ O)	250	ml
KFV05STD.L5	Karl Fischer volumetric Water Standard - 0.5% (1ml Methanol contains 5mg H ₂ O)	500	ml
KFV1STD.L5	Karl Fischer volumetric Water Standard - 1% (1 ml methanol contains 10 mg H ₂ O)	500	ml
KFOVENS.5G	Karl Fischer Solid standard for oven method (water content 1%)	5	g
KFOVEN.10G	Karl Fischer Lactose standard for oven method (water content 5%)	10	g
KFOVENC.10G	Karl Fischer Potassium Citrate standard for oven method (water content 5.55%)	10	g
KFFSTD.10G	Karl Fischer volumetric Fixed Water Standard - Sodium Tartrate Dihydrate(contains 15.66 +/- 0.05% H ₂ O)	10	g
KFFSTD.1G	Karl Fischer volumetric Fixed Water Standard - Sodium Tartrate Dihydrate(contains 15.66 +/- 0.05% H ₂ O)	1	g
KFLWS.L05	Karl Fischer Low Water Standard (30-40 ppm)	10x5	ml
KFOIL.80G	Karl Fischer Liquid Standard (mineral oil based) < 30 ppm	10x8	g

Beverages Control

These standards are CRM's under ISO 17034 and ISO/IEC 17025.

Metrological traceability to NIST. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Caffeine, Sugars

Ref. Number	Description	Volume	Msr
5190-0488.1.8	Caffeine kit includes caffeine standards at 0.5, 1, 2, 5, 25, 50, 100, 200 µg/mL in water, 8 x 1 ml	8x1	ml
F367440	Caffeine [CAS:58-08-2] 0.1mg/ml in Water	50	ml
F367440.1	Caffeine [CAS:58-08-2] 0.1mg/ml in Water	1	ml
F367490	Sucrose [CAS:57-50-1] 100g/l in Water	50	ml

Standards of Ethanol in Water

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35. The calibration is made with density meter.

Ref. Number	Description	Volume	Msr
Z03644113.L1	Ethanol 5 % (v/v)	100	ml
Z03644114.L1	Ethanol 20% (v/v)	100	ml
Z03644115.L1	Ethanol 30% (v/v)	100	ml
Z03644121.L1	Ethanol 50% (v/v)	100	ml

Ref. Number	Description	Volume	Msr
Z03644116.L1	Ethanol 60% (v/v)	100	ml
Z03644117.L1	Ethanol 70% (v/v)	100	ml
Z03644118.L1	Ethanol 80% (v/v)	100	ml
Z03644119.L1	Ethanol 90% (v/v)	100	ml
KET1	Kit of ethanolic solutions 9%; 11.50%; 14%	3x100	ml
KET1a	Kit of ethanolic solutions 5%, 9%; 11.50%; 14%	4x100	ml
KET2	Kit of ethanolic solutions 35%, 40%; 45%	3x100	ml
KET3	Kit of ethanolic solutions 50%, 60%; 70%, 80%	4x100	ml
KET7.L75	Standard Wine Material	750	ml

Total Acid Number (TAN) CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Traceability to International System of Units from BAM. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
TAN0001.075G	Total Acid Number (TAN) - 0.1 mgKOH/g	75	g
TAN0001.200G	Total Acid Number (TAN) - 0.1 mgKOH/g	200	g
TAN0005.075G	Total Acid Number (TAN) - 0.5 mgKOH/g	75	g
TAN0005.200G	Total Acid Number (TAN) - 0.5 mgKOH/g	200	g
TAN0010.075G	Total Acid Number (TAN) - 1 mgKOH/g	75	g
TAN0010.200G	Total Acid Number (TAN) - 1 mgKOH/g	200	g
TAN0015.075G	Total Acid Number (TAN) - 1.5 mgKOH/g	75	g
TAN0015.200G	Total Acid Number (TAN) - 1.5 mgKOH/g	200	g
TAN0020.075G	Total Acid Number (TAN) - 2 mgKOH/g	75	g
TAN0020.200G	Total Acid Number (TAN) - 2 mgKOH/g	200	g
TAN0025.075G	Total Acid Number (TAN) - 2.5 mgKOH/g	75	g
TAN0025.200G	Total Acid Number (TAN) - 2.5 mgKOH/g	200	g
TAN0030.075G	Total Acid Number (TAN) - 3 mgKOH/g	75	g
TAN0030.200G	Total Acid Number (TAN) - 3 mgKOH/g	200	g
TAN0050.075G	Total Acid Number (TAN) - 5 mgKOH/g	75	g
TAN0050.200G	Total Acid Number (TAN) - 5 mgKOH/g	200	g
TAN0100.075G	Total Acid Number (TAN) - 10 mgKOH/g	75	g
TAN0100.200G	Total Acid Number (TAN) - 10 mgKOH/g	200	g
TAN0200.075G	Total Acid Number (TAN) - 20 mgKOH/g	75	g
TAN0200.200G	Total Acid Number (TAN) - 20 mgKOH/g	200	g
TAN0500.075G	Total Acid Number (TAN) - 50 mgKOH/g	75	g
TAN0500.200G	Total Acid Number (TAN) - 50 mgKOH/g	200	g
TAN1000.075G	Total Acid Number (TAN) - 100 mgKOH/g	75	g
TAN1000.200G	Total Acid Number (TAN) - 100 mgKOH/g	200	g

Total Base Number (TBN) CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Traceability to International System of Units from BAM. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
TBN001.075G	Total Base Number (TBN) - 1 mgKOH/g	75	g
TBN001.200G	Total Base Number (TBN) - 1 mgKOH/g	200	g
TBN003.075G	Total Base Number (TBN) - 3 mgKOH/g	75	g
TBN003.200G	Total Base Number (TBN) - 3 mgKOH/g	200	g
TBN006.075G	Total Base Number (TBN) - 6 mgKOH/g	75	g
TBN006.200G	Total Base Number (TBN) - 6 mgKOH/g	200	g
TBN010.075G	Total Base Number (TBN) - 10 mgKOH/g	75	g
TBN010.200G	Total Base Number (TBN) - 10 mgKOH/g	200	g
TBN015.075G	Total Base Number (TBN) - 15 mgKOH/g	75	g
TBN015.200G	Total Base Number (TBN) - 15 mgKOH/g	200	g
TBN030.075G	Total Base Number (TBN) - 30 mgKOH/g	75	g
TBN030.200G	Total Base Number (TBN) - 30 mgKOH/g	200	g
TBN040.075G	Total Base Number (TBN) - 40 mgKOH/g	75	g
TBN040.200G	Total Base Number (TBN) - 40 mgKOH/g	200	g
TBN070.075G	Total Base Number (TBN) - 70 mgKOH/g	75	g
TBN070.200G	Total Base Number (TBN) - 70 mgKOH/g	200	g

E-cigarette

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Metrological traceability to NIST. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
E830.10K.100G	E-cigarette reference standard - Propylene glycol [CAS:57-55-6] 49.5% w/w ; Glycerol [CAS:56-81-5] 49.5% w/w ; Nicotine [CAS:54-11-5] 1% w/w	100	g
E830.10K.10G	E-cigarette reference standard - Propylene glycol [CAS:57-55-6] 49.5% w/w ; Glycerol [CAS:56-81-5] 49.5% w/w ; Nicotine [CAS:54-11-5] 1% w/w	10	g

Photo Reagents

Ref. Number	Description	Volume	Msr
FR-C14	Photo Reagent - Color Developer C14	1000	ml
FR-C37	Photo Reagent - Stop C37	1000	ml
FR-C55	Photo Reagent - Bleach C55	1000	ml
FR-C71	Photo Reagent - Fixer C71	1000	ml

Miscellaneous

Ref. Number	Description	Volume	Msr
Z16061128AB	Fehling's Solution (A+B)	2x500	ml
Z13794170.L1	Folin-Ciocalteu's phenol reagent	100	ml
Z16071130	Griess-Ilosvay's Reagent	100	ml
Z16081131	Nessler's Reagent A	500	ml

PHYSICO-CHEMICAL CRM

Conductivity CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Metrological traceability to International System of Units from NIST. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
CS0M0S.L25	Conductivity water (nominal 0 - 2 uS/cm) traceable to NIST	250	ml
CS5M0S.L5	Conductivity Standard 5 uS/cm at 25 C in 30% n-propanol	500	ml
CS10M0S.L5	Conductivity Standard 10 uS/cm at 25 C in 30% n-propanol	500	ml
CS15M0S.L5	Conductivity Standard 15 uS/cm at 25 C in 30% n-propanol	500	ml
CS20M0S.L5	Conductivity Standard 20 uS/cm at 25 C	500	ml
CS25M0S.L5	Conductivity Standard 25 uS/cm at 25 C	500	ml
CS50M0S.L5	Conductivity Standard 50 uS/cm at 25 C	500	ml
CS84M0S.L5	Conductivity Standard 84 uS/cm at 25 C	500	ml
CS1P2S.L5	Conductivity Standard 100 uS/cm at 25 C	500	ml
CS147M0S.L5	Conductivity Standard 147 uS/cm at 25 C	500	ml
CS2P2S.L5	Conductivity Standard 200 uS/cm at 25 C	500	ml
CS5P2S.L5	Conductivity Standard 500 uS/cm at 25 C	500	ml
CS718M0S.L5	Conductivity Standard 718 uS/cm at 25 C	500	ml
CS1P3S.L5	Conductivity Standard 1000 uS/cm at 25 C	500	ml
CS1413M0S.L5	Conductivity Standard 1413 uS/cm at 25 C	500	ml
CS15P2S.L5	Conductivity Standard 1500 uS/cm at 25 C	500	ml
CS2P3S.L5	Conductivity Standard 2000 uS/cm at 25 C	500	ml
CS2.5P53S.L5	Conductivity Standard 2500 uS/cm at 25 C	500	ml
CS3P3S.L5	Conductivity Standard 3000 uS/cm at 25 C	500	ml
CS5P3S.L5	Conductivity Standard 5000 uS/cm at 25 C	500	ml
CS8P3S.L5	Conductivity Standard 8000 uS/cm at 25 C	500	ml
CS1P4S.L5	Conductivity Standard 10000 uS/cm at 25 C	500	ml
CS1288P1S.L5	Conductivity Standard 12880 uS/cm at 25 C	500	ml
CS15P3S.L5	Conductivity Standard 15000 uS/cm at 25 C	500	ml
CS2P4S.L5	Conductivity Standard 20000 uS/cm at 25 C	500	ml
CS3P4S.L5	Conductivity Standard 30000 uS/cm at 25 C	500	ml
CS5P5S.L5	Conductivity Standard 50000 uS/cm at 25 C	500	ml
CS1P5S.L5	Conductivity Standard 100000 uS/cm at 25 C	500	ml
CS111M3MS.L5	Conductivity Standard 111.3 mS/cm at 25 C	500	ml
CS1118P3S.L5	Conductivity Standard 111800 uS/cm at 25 C	500	ml
CS15P5S.L5	Conductivity Standard 150000 uS/cm at 25 C	500	ml
CS2P5S.L5	Conductivity Standard 200000 uS/cm at 25 C	500	ml
CS3P5S.L5	Conductivity Standard 300000 uS/cm at 25 C	500	ml

Density CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025.
Calibration on density meter.

Ref. Number	Description	Volume	Msr
DNS06564.L1	Density Standard 25 °C, (Nominal density value 0.655 g/ml at 25 °C)	100	ml
DNS06609.L1	Density Standard 20 °C, (Nominal density value 0.660 g/ml at 20 °C)	100	ml
DNS06654.L1	Density Standard 15 °C, (Nominal density value 0.664 g/ml at 15 °C)	100	ml
DNS09342.L1	Density Standard 25 °C, (Nominal density value 0.934 g/ml at 25 °C)	100	ml
DNS09378.L1	Density Standard 20 °C, (Nominal density value 0.938 g/ml at 20 °C)	100	ml
DNS09413.L1	Density Standard 15 °C, (Nominal density value 0.941 g/ml at 15 °C)	100	ml
DNS09797.L1	Density Standard 25 °C, (Nominal density value 0.979 g/ml at 25 °C)	100	ml
DNS09811.L1	Density Standard 20 °C, (Nominal density value 0.981 g/ml at 20 °C)	100	ml
DNS09823.L1	Density Standard 15 °C, (Nominal density value 0.982 g/ml at 15 °C)	100	ml
DNS10222.L1	Density Standard 25 °C, (Nominal density value 1.022 g/ml at 25 °C)	100	ml
DNS10236.L1	Density Standard 20 °C, (Nominal density value 1.024 g/ml at 20 °C)	100	ml
DNS10248.L1	Density Standard 15 °C, (Nominal density value 1.025 g/ml at 15 °C)	100	ml
DNS10650.L1	Density Standard 25 °C, (Nominal density value 1.065 g/ml at 25 °C)	100	ml
DNS10669.L1	Density Standard 20 °C, (Nominal density value 1.067 g/ml at 20 °C)	100	ml
DNS10687.L1	Density Standard 15 °C, (Nominal density value 1.069 g/ml at 15 °C)	100	ml
DNS11231.L1	Density Standard 25 °C, (Nominal density value 1.123 g/ml at 25 °C)	100	ml
DNS11256.L1	Density Standard 20 °C, (Nominal density value 1.126 g/ml at 20 °C)	100	ml
DNS11280.L1	Density Standard 15 °C, (Nominal density value 1.128 g/ml at 15 °C)	100	ml
DNS11868.L1	Density Standard 25 °C, (Nominal density value 1.187 g/ml at 25 °C)	100	ml
DNS11915.L1	Density Standard 20 °C, (Nominal density value 1.191 g/ml at 20 °C)	100	ml
DNS11962.L1	Density Standard 15 °C, (Nominal density value 1.196 g/ml at 15 °C)	100	ml
DNS12771.L1	Density Standard 25 °C, (Nominal density value 1.277 g/ml at 25 °C)	100	ml
DNS12800.L1	Density Standard 20 °C, (Nominal density value 1.280 g/ml at 20 °C)	100	ml
DNS12829.L1	Density Standard 15 °C, (Nominal density value 1.283 g/ml at 15 °C)	100	ml
DNS16136.L1	Density Standard 25 °C, (Nominal density value 1.614 g/ml at 25 °C)	100	ml
DNS16218.L1	Density Standard 20 °C, (Nominal density value 1.623 g/ml at 20 °C)	100	ml
DNS16300.L1	Density Standard 15 °C, (Nominal density value 1.631 g/ml at 15 °C)	100	ml

Osmolality standards

These standards are CRM's under ISO 17034 and ISO/IEC 17025.
Calibration on osmometer.

Ref. Number	Description	Volume	Msr
OSM0050.L06	Certified reference solution for osmometer calibration - 50 mOsm/kg H2O	12x5	ml
OSM0100.L06	Certified reference solution for osmometer calibration acc. to Ph Eur 2.2.35 - 100 mOsm/kg H2O	12x5	ml
OSM0200.L06	Certified reference solution for osmometer calibration acc. to Ph Eur 2.2.35 - 200 mOsm/kg H2O	12x5	ml
OSM0290.L06	Certified reference solution for osmometer calibration - 290 mOsm/kg H2O	12x5	ml
OSM0300.L06	Certified reference solution for osmometer calibration acc. to Ph Eur 2.2.35 - 300 mOsm/kg H2O	12x5	ml
OSM0400.L06	Certified reference solution for osmometer calibration acc. to Ph Eur 2.2.35 - 400 mOsm/kg H2O	12x5	ml
OSM0500.L06	Certified reference solution for osmometer calibration acc. to Ph Eur 2.2.35 - 500 mOsm/kg H2O	12x5	ml
OSM0600.L06	Certified reference solution for osmometer calibration acc. to Ph Eur 2.2.35 - 600 mOsm/kg H2O	12x5	ml
OSM0700.L06	Certified reference solution for osmometer calibration acc. to Ph Eur 2.2.35 - 700 mOsm/kg H2O	12x5	ml
OSM0850.L06	Certified reference solution for osmometer calibration - 850 mOsm/kg H2O	12x5	ml
OSM0900.L06	Certified reference solution for osmometer calibration - 900 mOsm/kg H2O	12x5	ml
OSM1000.L06	Certified reference solution for osmometer calibration - 1000 mOsm/kg H2O	12x5	ml
OSM1500.L06	Certified reference solution for osmometer calibration - 1500 mOsm/kg H2O	12x5	ml
OSM2000.L06	Certified reference solution for osmometer calibration - 2000 mOsm/kg H2O	12x5	ml

Petrochemical CRM

All standards are certified reference materials under ISO 17034 and ISO/IEC 17025 and are supplied in tamper evident UN compliant security packs.

Ref. Number	Description	Volume	Msr
PPCPD.L25	Cloud point Standard acc to ASTM D2500 and ISO 3015 (diesel)	250	ml
PPCFPPS.L25	Cold Filter Plugging Point (CFPP) Standard acc to ASTM D6371 and EN 116 (summer diesel)	250	ml
PPCFPPW.L25	Cold Filter Plugging Point (CFPP) Standard acc to ASTM D6371 and EN 116 (winter diesel)	250	ml
PPCFPPWM20.L25	Cold Filter Plugging Point (CFPP) Standard acc to ASTM D6371 and EN 116 (winter diesel) - around minus 20	250	ml
PPDV20.L25	Combined Viscosity (20 cSt) and Density Standard	250	ml
PPDV20.L5	Combined Viscosity (20 cSt) and Density Standard	500	ml
PPDND.L25	Density Standard acc to ASTM D4052 and ISO 12185 (diesel)	250	ml
PPDNG.L25	Density Standard acc to ASTM D4052 and ISO 12185 (gasoline)	250	ml
PPDD.L25	Distillation Standard acc to ASTM D86 and EN ISO 3405 (diesel)	250	ml
PPDG.L25	Distillation Standard acc to ASTM D86 and EN ISO 3405 (gasoline)	250	ml
PPFPD.L25	Flash point Standard acc to ASTM D93 and EN ISO 2719 (diesel)	250	ml
PPFPJ.L25	Flash point Standard acc to ASTM D93 and EN ISO 2719 (jet fuel)	250	ml
PPMPG.L25	Multi-Parameter Standard for determination of physical properties of gasoline	250	ml

Ref. Number	Description	Volume	Msr
PPMPD.L25	Multi-Parameter Standard for determination of physical properties of petroleum products	250	ml
PPMPD.L5	Multi-Parameter Standard for determination of physical properties of petroleum products	500	ml
PPPPDS.L25	Pour point Standard acc to ASTM D97 and EN ISO 3016 (summer diesel)	250	ml
PPPPD.L25	Pour point Standard acc to ASTM D97 and EN ISO 3016 (winter diesel)	250	ml
PWD.L06	Pure Water Density Standard ISO/IEC 17025 and ISO 17034 certified, density: 0.9982 g/mL at 20 °C, density: 0.9970 g/mL at 25 °C	60	ml
PWD.L06.3	Pure Water Density Standard ISO/IEC 17025 and ISO 17034 certified, density: 0.9982 g/mL at 20 °C, density: 0.9970 g/mL at 25 °C	180	ml
PPV20.L25	Viscosity Standard acc to ASTM D445 and EN ISO 3104 (20 cSt)	250	ml
PPV20.L5	Viscosity Standard acc to ASTM D445 and EN ISO 3104 (20 cSt)	500	ml
PPVS3.L25	Viscosity Standard acc to ASTM D445 and EN ISO 3104 (S3)	250	ml
PPVS3.L5	Viscosity Standard acc to ASTM D445 and EN ISO 3104 (S3)	500	ml

pH Buffer CRM

Primary pH Buffer CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. The metrological traceability is assured through calibration by primary method for pH measurement - Harned cell. Expanded uncertainty - 0.003 ÷ 0.005. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
PH214.L5	pH 1.679 at 25 C Potassium Tetraoxalate (Primary pH Buffer Solution)	500	ml
PH215.L5	pH 3.776 at 25 C Potassium Dihydrogen Citrate (Primary pH Buffer Solution)	500	ml
PH216.L5	pH 4.008 at 25 C Potassium Hydrogen Phthalate (Primary pH Buffer Solution)	500	ml
PH217.L5	pH 6.865 at 25 C Potassium Dihydrogen Phosphate/ Hydrogen Phosphate (Primary pH Buffer Solution)	500	ml
PH218.L5	pH 7.413 at 25 C Potassium Dihydrogen Phosphate/ di-Sodium Hydrogen Phosphate (Primary pH Buffer Solution)	500	ml
PH219.L5	pH 9.180 at 25 C Sodium Tetraborate (Primary pH Buffer Solution)	500	ml
PH220.L5	pH 10.01 at 25 C Sodium Carbonate/Sodium Hydrogen Carbonate (Primary pH Buffer Solution)	500	ml

Secondary pH Buffer CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
PH014.L5	pH 1.679 at 25 C Potassium Tetraoxalate	500	ml
PH014.1L		1000	ml
PH015.L5	pH 3.776 at 25 C Potassium Dihydrogen Citrate	500	ml
PH015.1L		1000	ml
PH016.L5	pH 4.008 at 25 C Potassium Hydrogen Phthalate	500	ml
PH016.1L		1000	ml

Ref. Number	Description	Volume	Msr
PH017.L5	pH 6.865 at 25 C Potassium Dihydrogen Phosphate/ Hydrogen Phosphate	500	ml
PH017.1L		1000	ml
PH018.L5	pH 7.413 at 25 C Potassium Dihydrogen Phosphate/ di-Sodium Hydrogen Phosphate	500	ml
PH018.1L		1000	ml
PH019.L5	pH 9.180 at 25 C Sodium Tetraborate	500	ml
PH019.1L		1000	ml
PH020.L5	pH 10.01 at 25 C Sodium Carbonate/Sodium Hydrogen Carbonate	500	ml
PH020.1L		1000	ml

Color-coded pH Buffer CRM

These pH Buffers are color-coded for simplicity.

They are CRM's under ISO 17034 and ISO/IEC 17025. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
PH004.L5	pH 4.00 at 20 C coloured Citric acid/ Sodium Hydroxide/ Sodium Chloride	500	ml
PH004.1L		1000	ml
PH007.L5	pH 7.00 at 20 C coloured Potassium Dihydrogen Phosphate/di- Sodium Hydrogen Phosphate	500	ml
PH007.1L		1000	ml
PH010.L5	pH 10.00 at 20 C coloured Borax/Sodium Hydroxide	500	ml
PH010.1L		1000	ml

Reference pH Buffer CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
PH101.L5	pH 1.00 at 20 C Glycine/ Sodium Chloride/ Hydrochloric Acid	500	ml
PH101.1L		1000	ml
PH102.L5	pH 2.00 at 20 C Citric Acid/ Sodium Chloride/ Hydrochloric Acid	500	ml
PH102.1L		1000	ml
PH103.L5	pH 3.00 at 20 C Citric Acid/ Sodium Chloride/ Hydrochloric Acid	500	ml
PH103.1L		1000	ml
PH104.L5	pH 4.00 at 20 C Citric Acid/ Sodium Chloride/ Sodium Hydroxide	500	ml
PH104.1L		1000	ml
PH105.L5	pH 5.00 at 20 C Citric Acid/ Sodium Hydroxide	500	ml
PH105.1L		1000	ml
PH106.L5	pH 6.00 at 20 C Citric Acid/ Sodium Hydroxide	500	ml
PH106.1L		1000	ml
PH107.L1	pH 7.00 at 20 C di-Sodium Hydrogen Phosphate/ Potassium Dihydrogen Phosphate	100	ml
PH107.L5		500	ml
PH107.1L		1000	ml
PH108.L5	pH 8.00 at 20 C Boric Acid/ Sodium Chloride/ Sodium Hydroxide	500	ml
PH108.1L		1000	ml

Ref. Number	Description	Volume	Msr
PH109.L5	pH 9.00 at 20 C Boric Acid/ Potassium Chloride/ Sodium Hydroxide	500	ml
PH109.1L		1000	ml
PH110.L5	pH 10.00 at 20 C Boric Acid/ Potassium Chloride/ Sodium Hydroxide	500	ml
PH110.1L		1000	ml
PH111a.L5	pH 11.00 at 20 C Disodium Hydrogen Phosphate/ Sodium Hydroxide	500	ml
PH111a.1L		1000	ml
PH112.L5	pH 12.00 at 20 C di-Sodium Hydrogen Phosphate/ Sodium Hydroxide	500	ml
PH112.1L		1000	ml
PH113.L5	pH 13.00 at 20 C Glycine/ Sodium Hydroxide/ Sodium Chloride	500	ml
PH113.1L		1000	ml

Pt-Co/ Hazen CRM

These standards are CRM's under ISO 17034 and ISO/IEC 17025 and are used for color determination of liquids related to ISO 7887, ASTM D1209-05, APHA (2120B), EPA (110.1), ACS and USP. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
HZN0.L5	Pt-Co/ Hazen 0 Colour Reference Standard (Optically pure water)	500	ml
HZN5.L1	Pt-Co/ Hazen 5 Colour Reference Standard	100	ml
HZN5.L5	Pt-Co/ Hazen 5 Colour Reference Standard	500	ml
HZN10.L1	Pt-Co/ Hazen 10 Colour Reference Standard	100	ml
HZN10.L5	Pt-Co/ Hazen 10 Colour Reference Standard	500	ml
HZN15.L1	Pt-Co/ Hazen 15 Colour Reference Standard	100	ml
HZN15.L5	Pt-Co/ Hazen 15 Colour Reference Standard	500	ml
HZN20.L1	Pt-Co/ Hazen 20 Colour Reference Standard	100	ml
HZN20.L5	Pt-Co/ Hazen 20 Colour Reference Standard	500	ml
HZN25.L1	Pt-Co/ Hazen 25 Colour Reference Standard	100	ml
HZN25.L5	Pt-Co/ Hazen 25 Colour Reference Standard	500	ml
HZN30.L1	Pt-Co/ Hazen 30 Colour Reference Standard	100	ml
HZN30.L5	Pt-Co/ Hazen 30 Colour Reference Standard	500	ml
HZN35.L1	Pt-Co/ Hazen 35 Colour Reference Standard	100	ml
HZN35.L5	Pt-Co/ Hazen 35 Colour Reference Standard	500	ml
HZN40.L1	Pt-Co/ Hazen 40 Colour Reference Standard	100	ml
HZN40.L5	Pt-Co/ Hazen 40 Colour Reference Standard	500	ml
HZN50.L1	Pt-Co/ Hazen 50 Colour Reference Standard	100	ml
HZN50.L5	Pt-Co/ Hazen 50 Colour Reference Standard	500	ml
HZN60.L1	Pt-Co/ Hazen 60 Colour Reference Standard	100	ml
HZN60.L5	Pt-Co/ Hazen 60 Colour Reference Standard	500	ml
HZN70.L1	Pt-Co/ Hazen 70 Colour Reference Standard	100	ml
HZN70.L5	Pt-Co/ Hazen 70 Colour Reference Standard	500	ml
HZN100.L1	Pt-Co/ Hazen 100 Colour Reference Standard	100	ml
HZN100.L5	Pt-Co/ Hazen 100 Colour Reference Standard	500	ml
HZN150.L1	Pt-Co/ Hazen 150 Colour Reference Standard	100	ml
HZN150.L5	Pt-Co/ Hazen 150 Colour Reference Standard	500	ml

Ref. Number	Description	Volume	Msr
HZN200.L1	Pt-Co/ Hazen 200 Colour Reference Standard	100	ml
HZN200.L5	Pt-Co/ Hazen 200 Colour Reference Standard	500	ml
HZN250.L1	Pt-Co/ Hazen 250 Colour Reference Standard	100	ml
HZN250.L5	Pt-Co/ Hazen 250 Colour Reference Standard	500	ml
HZN300.L1	Pt-Co/ Hazen 300 Colour Reference Standard	100	ml
HZN300.L5	Pt-Co/ Hazen 300 Colour Reference Standard	500	ml
HZN350.L1	Pt-Co/ Hazen 350 Colour Reference Standard	100	ml
HZN350.L5	Pt-Co/ Hazen 350 Colour Reference Standard	500	ml
HZN400.L1	Pt-Co/ Hazen 400 Colour Reference Standard	100	ml
HZN400.L5	Pt-Co/ Hazen 400 Colour Reference Standard	500	ml
HZN450.L1	Pt-Co/ Hazen 450 Colour Reference Standard	100	ml
HZN450.L5	Pt-Co/ Hazen 450 Colour Reference Standard	500	ml
HZN500.L1	Pt-Co/ Hazen 500 Colour Reference Standard	100	ml
HZN500.L5	Pt-Co/ Hazen 500 Colour Reference Standard	500	ml

Turbidity CRM

These solutions are CRM's under ISO 17034 and ISO/IEC 17025. Certificates of analysis created in accordance with ISO Guide 31 and ISO Guide 35.

Ref. Number	Description	Volume	Msr
TD0.1NTU.L1	Turbidity Standard <0.1 NTU	100	ml
TD0.1NTU.L5	Turbidity Standard <0.1 NTU	500	ml
TD0.5NTU.L1	Turbidity Standard 0.5 NTU (Formazin)	100	ml
TD0.5NTU.L5	Turbidity Standard 0.5 NTU (Formazin)	500	ml
TD1NTU.L1	Turbidity Standard 1 NTU (Formazin)	100	ml
TD1NTU.L5	Turbidity Standard 1 NTU (Formazin)	500	ml
TD5NTU.L1	Turbidity Standard 5 NTU (Formazin)	100	ml
TD5NTU.L5	Turbidity Standard 5 NTU (Formazin)	500	ml
TD10NTU.L1	Turbidity Standard 10 NTU (Formazin)	100	ml
TD10NTU.L5	Turbidity Standard 10 NTU (Formazin)	500	ml
TD15NTU.L1	Turbidity Standard 15 NTU (Formazin)	100	ml
TD15NTU.L5	Turbidity Standard 15 NTU (Formazin)	500	ml
TD20NTU.L1	Turbidity Standard 20 NTU (Formazin)	100	ml
TD20NTU.L5	Turbidity Standard 20 NTU (Formazin)	500	ml
TD40NTU.L1	Turbidity Standard 40 NTU (Formazin)	100	ml
TD40NTU.L5	Turbidity Standard 40 NTU (Formazin)	500	ml
TD50NTU.L1	Turbidity Standard 50 NTU (Formazin)	100	ml
TD50NTU.L5	Turbidity Standard 50 NTU (Formazin)	500	ml
TD100NTU.L1	Turbidity Standard 100 NTU (Formazin)	100	ml
TD100NTU.L5	Turbidity Standard 100 NTU (Formazin)	500	ml
TD200NTU.L1	Turbidity Standard 200 NTU (Formazin)	100	ml
TD200NTU.L5	Turbidity Standard 200 NTU (Formazin)	500	ml
TD400NTU.L1	Turbidity Standard 400NTU (Formazin)	100	ml
TD400NTU.L5	Turbidity Standard 400NTU (Formazin)	500	ml
TD500NTU.L1	Turbidity Standard 500 NTU (Formazin)	100	ml
TD500NTU.L5	Turbidity Standard 500 NTU (Formazin)	500	ml

Ref. Number	Description	Volume	Msr
TD750NTU.L1	Turbidity Standard 750 NTU (Formazin)	100	ml
TD750NTU.L5	Turbidity Standard 750 NTU (Formazin)	500	ml
TD800NTU.L1	Turbidity Standard 800NTU (Formazin)	100	ml
TD800NTU.L5	Turbidity Standard 800NTU (Formazin)	500	ml
TD1000NTU.L1	Turbidity Standard 1000 NTU (Formazin)	100	ml
TD1000NTU.L5	Turbidity Standard 1000 NTU (Formazin)	500	ml
TD2000NTU.L1	Turbidity Standard 2000 NTU (Formazin)	100	ml
TD2000NTU.L5	Turbidity Standard 2000 NTU (Formazin)	500	ml
TD4000NTU.L1	Turbidity Standard 4000NTU (Formazin)	100	ml
TD4000NTU.L5	Turbidity Standard 4000NTU (Formazin)	500	ml



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