

Specification – Certified Reference Material

Element Standard Solution 1000 mg/L

Accreditation:



Deutsche
Akkreditierungsstelle
D-RM-15185-01-00

Merck KGaA, Darmstadt, Germany is accredited by the German accreditation authority as registered reference material producer (D-RM-15185-01-00) in accordance with **ISO 17034**.



Deutsche
Akkreditierungsstelle
D-K-15185-01-00

Merck KGaA, Darmstadt, Germany - Calibration laboratory is accredited by the German accreditation authority as registered Calibration Laboratory (D-K-15185-01-00) according to **DIN EN ISO/IEC 17025**.

Description of CRM: Element standard solution 1000 mg/l

Expiry date: 4 years

Storage: +15°C to +25°C tightly closed in the original container

Specification: 956 – 1011 mg/kg

Article	Analyte	Description of CRM	Associated uncertainty**, $U=k\cdot u$ ($k=2$) as mass fraction
119770	Al	Aluminium standard solution	± 5 mg/kg
170204	Sb	Antimony standard solution	± 5 mg/kg
119773	As	Arsenic standard solution	± 5 mg/kg
119774	Ba	Barium standard solution	± 6 mg/kg
170207	Be	Beryllium standard solution	± 6 mg/kg
119804	Bi	Bismuth standard solution	± 5 mg/kg
119500	B	Boron standard solution	± 5 mg/kg
119777	Cd	Cadmium standard solution	± 5 mg/kg
119778	Ca	Calcium standard solution	± 5 mg/kg
170212	Cs	Cesium standard solution	± 5 mg/kg
119779	Cr	Chromium standard solution	± 5 mg/kg
119785	Co	Cobalt standard solution	± 5 mg/kg
119786	Cu	Copper standard solution	± 5 mg/kg
170216	Au	Gold standard solution	± 5 mg/kg
119504	In	Indium standard solution	± 5 mg/kg
119781	Fe	Iron standard solution	± 5 mg/kg
119776	Pb	Lead standard solution	± 5 mg/kg
170223	Li	Lithium standard solution	± 5 mg/kg
119788	Mg	Magnesium standard solution	± 5 mg/kg
119789	Mn	Manganese standard solution	± 5 mg/kg
170226	Hg	Mercury standard solution	± 8 mg/kg
170227	Mo	Molybdenum standard solution	± 5 mg/kg
119792	Ni	Nickel standard solution	± 5 mg/kg
114282	Pd	Palladium standard solution	± 5 mg/kg
170219	Pt	Platinum standard solution	± 5 mg/kg

Merck KGaA, 64271 Darmstadt, Germany, Tel.: +49 (0)6151 72-2440
 EMD Millipore Corporation, 400 Summit Drive Burlington MA 01803, USA, Tel. +1-978-715-4321
 Sigma-Aldrich Canada Co. or Millipore (Canada) Ltd., 2149 Winston Park, Dr. Oakville,
 Ontario, L6H 6J8, Phone: +1 800-565-1400



170230	K	Potassium standard solution	± 5 mg/kg
119513	Sc	Scandium standard solution	± 5 mg/kg
119796	Se	Selenium standard solution	± 8 mg/kg
112310	Si	Silicon standard solution	± 5 mg/l (*)
170236	Si	Silicon standard solution	± 5 mg/kg
119797	Ag	Silver standard solution	± 5 mg/kg
170238	Na	Sodium standard solution	± 5 mg/kg
119799	Sr	Strontium standard solution	± 5 mg/kg
119514	Te	Tellurium standard solution	± 5 mg/kg
119801	Tl	Thallium standard solution	± 5 mg/kg
170242	Sn	Tin standard solution	± 5 mg/kg
170243	Ti	Titanium standard solution	± 5 mg/kg
170244	W	Tungsten standard solution	± 5 mg/kg
170245	V	Vanadium standard solution	± 5 mg/kg
119809	Y	Yttrium standard solution	± 5 mg/kg
119806	Zn	Zinc standard solution	± 5 mg/kg
170234	Zr	Zirconium standard solution	± 5 mg/kg

* Method of Analysis: acidimetric titration; Standard is not within accreditation scope of ISO 17034 and DIN EN ISO/IEC 17025.

****The uncertainty can vary depending on the primary reference material.**

Metrological traceability: Directly traceable to the corresponding / suitable **NIST SRM®**
NIST: National Institute of Standards and Technology, Gaithersburg, USA.

Measurement method: Inductively coupled plasma optical emission spectrometry ICP-OES

Intended use: This reference material is intended for use as a calibration standard in element analysis.

For more detailed information please read the certification report on our website.

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