SCP SCIENCE manufactures and distributes supplies, calibration standards and reagents for use in Atomic Absorption Spectroscopy. We stock all popular Calibration Standards, Matrix Modifiers, Ionization Buffers, and other common consumables.

Single Element Calibration Standards

Popular standards are available for Flame and Graphite Furnace Atomic Absorption. Each standard includes a detailed Certificate of Analysis and direct traceability to NIST.

- Certificate of Analysis with actual matrix, actual concentration, and traceability to NIST 3100 Series Standards
  - Complete documentation for audit purposes
- 2 expiry dates (up to 21 months unopened & 15 months opened)
  - Longer shelf life for unopened bottles
- Immediate availability for most common elements

Element	Symbol	Matrix	Code	Catalog Number 1000 µg/ml 500 ml
Aluminum	Al	HCl	✓ ⑧	140-002-135
Antimony	Sb	HNO_3 / tr. Tartaric Acid	✓ ⑧	140-001-515
Arsenic	As	HNO_3	✓ ⑧	140-001-335
Barium	Ba	HNO_3	✓ ⑧	140-001-565
Beryllium	Be	HNO_3	✓ ⑧	140-001-045
Bismuth	Bi	HNO_3	✓ ⑧	140-001-835
Boron	B	H_2O		140-000-055
Cadmium	Cd	HNO_3	✓ ⑧	140-001-485
Calcium	Ca	HNO_3	✓ ⑧	140-001-205
Chromium	Cr	HCl	✓ ⑧	140-002-245
Cobalt	Co	HNO_3	✓ ⑧	140-001-275
Copper	Cu	HNO_3	✓ ⑧	140-001-295
Gold	Au	HCl	✓ ⑧	140-002-795
Iron	Fe	HNO_3	✓ ⑧	140-001-265
Lead	Pb	HNO_3	✓ ⑧	140-001-825
Lithium	Li	HNO_3	✓ ⑧	140-001-035
Magnesium	Mg	HNO_3	✓ ⑧	140-001-125
Manganese	Mn	HNO_3	✓ ⑧	140-001-255
Mercury	Hg	HNO_3	✓ ⑧	140-001-805
Molybdenum	Mo	H_2O		140-000-425
Nickel	Ni	HNO_3	✓ ⑧	140-001-285
Potassium	K	HNO_3	✓ ⑧	140-001-195
Selenium	Se	HNO_3	✓ ⑧	140-001-345
Silicon	Si	H_2O / tr. HF		140-000-145
Silver	Ag	HNO_3	✓ ⑧	140-001-475
Sodium	Na	HNO_3	✓ ⑧	140-001-115
Strontium	Sr	HNO_3	✓ ⑧	140-001-385
Tin	Sn	HCl	✓ ⑧	140-002-505
Titanium	Ti	H_2O / tr. HF		140-000-225
Vanadium	V	HNO_3	✓ ⑧	140-001-235
Zinc	Zn	HNO_3	✓ ⑧	140-001-305

⊗ *Glass Container* ⑥ *Poison* ③ *Flammable*
✓ *Dangerous Goods** ⑧ *Corrosive* ⑤ *Oxidant*

* as defined by :
- Hazardous Materials Regulations of the U.S. Department of Transportation, Tariff No. BOE-6000-R
- Canadian Transportation of Dangerous Goods Act and Regulations, Revision December 2000
- International Air Transport Association - Dangerous Goods Regulation, 40th Edition

Modifiers for Graphite Furnace (GFAA)

Matrix Modifiers allow the optimization of analytical conditions to provide better GFAA instrument response and better detection limits. All commonly used products are available in addition to custom formulations.

- Prepared from 99.999% pure starting materials
  - Extremely low level of metallic impurities in the final solution
- Custom formulations available
  - Designed for your specific application
- Complete Certificate of Analysis listing the actual concentration and the level of metallic impurities
  - Complete documentation for audit purposes

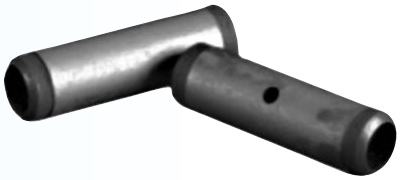
Matrix Modifier	Formulation	Code	Catalog Number 100 ml	250 ml	500 ml
Magnesium Nitrate	2% Mg in 5% HNO_3	✓ ⑧	140-003-031	140-003-032	140-003-035
Palladium Nitrate	0.2% Pd in 5% HNO_3	✓ ⑧	140-003-061	140-003-062	140-003-065
Palladium Nitrate	2% Pd in 5% HNO_3	✓ ⑧	140-003-091	140-003-092	140-003-095
Calcium Nitrate	2% Ca in 5% HNO_3	✓ ⑧	140-003-121	140-003-122	140-003-125
Ammonium Phosphate	40% w/v in 2% HNO_3	✓ ⑧	140-003-151	140-003-152	140-003-155
Ammonium Nitrate	5% w/v in 2% HNO_3	✓ ⑧	140-003-181	140-003-182	140-003-185
Palladium/Magnesium Nitrate	0.3% Pd + 0.5% Mg in 1% HNO_3	✓ ⑧	140-003-191	140-003-192	140-003-195
Nickel Nitrate	5% Ni in 5% HNO_3	✓ ⑧	140-003-211	140-003-212	140-003-215
Ionization Buffers					
Cesium Chloride	1% Cs in 2% HCl	✓ ⑧	140-003-241	140-003-242	140-003-245
Cesium Nitrate	1% Cs in 2% HNO_3	✓ ⑧	140-003-271	140-003-272	140-003-275
Lithium Chloride	2% Li in 2% HCl	✓ ⑧	140-003-301	140-003-302	140-003-305
Lithium Nitrate	2% Li in 2% HNO_3	✓ ⑧	140-003-331	140-003-332	140-003-335
Potassium Chloride	1% K in 2% HCl	✓ ⑧	140-003-361	140-003-362	140-003-365
Potassium Nitrate	1% K in 2% HNO_3	✓ ⑧	140-003-391	140-003-392	140-003-395
Releasing Agents					
Lanthanum Chloride	5% La in 5% HCl	✓ ⑧	140-003-421	140-003-422	140-003-425
Lanthanum Nitrate	5% La in 5% HNO_3	✓ ⑧	140-003-451	140-003-452	140-003-455

⊗ *Glass Container* ⑥ *Poison* *Flammable*
✓ *Dangerous Goods** ⑧ *Corrosive* *Oxidant*

* as defined by :
- Hazardous Materials Regulations of the U.S. Department of Transportation, Tariff No. BOE-6000-R
- Canadian Transportation of Dangerous Goods Act and Regulations, Revision December 2000
  International Air Transport Association - Dangerous Goods Regulation, 40th Edition

Graphite Furnace Tubes

- Made from high purity, pyrolytically coated graphite
- Cross references available for OEM products
- Unconditional performance guarantee
- **FREE** Atomic Absorption standard with each package purchased



Certificate of Analysis: Atomic Absorption Standard

Certificate of Analysis

Catalog number	**140-001-285**
Description	**Nickel – AA Standard**
Nominal Concentration	**1000 µg/ml**
Lot number	**SC5004999**
Expiration Date	**October 2006** (*unopened bottle*)
Starting Material	Ni metal

Opened Bottle Expiry Information
15 months after opening, up to unopened expiration date

_____
Date bottle opened

Analysis of Solution Standard by Inductively Coupled Plasma Spectroscopy (ICP-AES) traceable to NIST Standard Reference Material 3136.

Actual Concentration :	**1000 µg/ml**
Matrix :	**4% HNO_3**

Certified by : _____ **Date of certification : January 28, 2005**
Alketa Mixha, Chemist

This AA Standard is guaranteed to be stable and accurate to within ± 0.5% of the actual concentration up to the unopened expiry date, if sealed, or 12 months after opening of the bottle, up to the unopened expiry date provided the solution is kept tightly capped and stored under normal laboratory conditions. For these solutions, 18 megohm/cm double deionized water, ACS-grade acids and Class A glassware are used. The Material Safety Data Sheet and this Certificate of Analysis are available on our web site. (Ce certificat est également disponible en français)

Manufactured according to an ISO 9001:2000 Quality System and ISO 17025 (in-process)

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