

Annexure 1

Material description: Standards for Atomic Absorption Spectroscopy (AAS).

1. Standards must be suitable for use in Atomic Absorption Spectroscopy (AAS).
2. Standards must be Certified Reference Material (CRM)/ Standard Reference Material (SRM) grade.
3. Standards must be single component solution.

(Required elements for standard and respective quantities are mentioned in the table below)

Sl. No.	Element	Concentration	Quantity
1 A	Aluminium (Al)	1000 mg/L Al in nitric acid	250 mL
1 B	Arsenic (As)	1000 mg/L As in nitric acid	250 mL
1 C	Bismuth (Bi)	1000 mg/L Bi in nitric acid	250 mL
1 D	Cadmium (Cd)	1000 mg/L Cd in nitric acid	250 mL
1 E	Calcium (Ca)	1000 mg/L Ca in nitric acid	250 mL
1 F	Caesium (Cs)	1000 mg/L Cs in nitric acid	250 mL
1 G	Chromium (Cr)	1000 mg/L Cr in nitric acid	250 mL
1 H	Cobalt (Co)	1000 mg/L Co in nitric acid	250 mL
1 I	Copper (Cu)	1000 mg/L Cu in nitric acid	250 mL
1 J	Iron (Fe)	1000 mg/L Fe in nitric acid	250 mL
1 K	Lanthanum (La)	1000 mg/L La in nitric acid	250 mL
1 L	Lead (Pb)	1000 mg/L Pb in nitric acid	250 mL
1 M	Lithium (Li)	1000 mg/L Li in nitric acid	250 mL
1 N	Magnesium (Mg)	1000 mg/L Mg in nitric acid	250 mL
1 O	Manganese (Mn)	1000 mg/L Mn in nitric acid	250 mL
1 P	Mercury (Hg)	1000 mg/L Hg in nitric acid	250 mL
1 Q	Molybdenum (Mo)	1000 mg/L Mo in hydrochloric acid	250 mL
1 R	Nickel (Ni)	1000 mg/L Ni in nitric acid	250 mL
1 S	Potassium (K)	1000 mg/L K in nitric acid	250 mL
1 T	Selenium (Se)	1000 mg/L Se in nitric acid	250 mL
1 U	Sodium (Na)	1000 mg/L Na in nitric acid	250 mL
1 V	Stannous (Sn)	1000 mg/L Sn in hydrochloric acid	250 mL
1 W	Strontium (Sr)	1000 mg/L Sr in nitric acid	250 mL
1 X	Vanadium (V)	1000 mg/L V in nitric acid	250 mL
1 Y	Zinc (Zn)	1000 mg/L Zn in nitric acid	250 mL
2	Lanthanum(III) nitrate hexahydrate ($\text{La}(\text{NO}_3)_3 \cdot 6\text{H}_2\text{O}$)	Purity: > 99%	200 gm
3	Caesium Nitrate (CsNO_3)	Purity: >99%	250gm