Certificate of Analysis

Secondary Reference Standard NIST traceable

Multielement Standard Solution 100 mg/L (in 5% HNO_3)

Molecular Formula: NA
Molecular Weight: NA
Packing : 100 mL
CAS No.: **NA**
Description: ICP Multielement Standard Solution

Lot No.: M-004.5
Cat No.: NIST -069
Dt. of Issue of Certificate: 16/06/2026
Dt. of Mfr: June 2026
Exp. Dt.: May 2028

TABLE :1 Certified Value

Name of elements/ Symbol	Certified Value as mass concentration	Expanded Uncertainty (K=2) as mass concentration	Traceable to NIST SRM
Arsenic (As)	99.91(mg/l)	± 4	3103a
Iron(Fe)	99.88(mg/l)	± 5	3126a
Nickel(Ni)	100.34(mg/l)	± 3	3136
Magnesium(Mg)	100.25(mg/l)	± 6	3131a
Zinc(Zn)	100.30(mg/l)	± 5	3168a

Certification process in Detail: *ICP Multi element standards are prepared gravimetrically from high purity raw materials in either high purity acids or high purity bases and diluted with filtered (0.22µm), high purity water. All balances are regularly calibrated with analytical weight sets traceable to primary weight by PTB. The density of each batch is measured in g/cm^3 at 25°C and is used to calculate the concentration in mg/l. Characterization of ICP multi element standards is carried out by the accredited quality control (QC)SRDLAB Derabassi, According to ISO/IEC17025 by Inductively coupled plasma optical emission spectroscopy (ICP-OES).*

Density: The density of the standard solution is 1.0108 g/cm^3 at 25°C

Metrological traceability*: This reference material has been measured applying high precision ICP-OES and is traceable to the corresponding NIST SRM as mentioned on* ***Table 1.***

Intended use: This reference material is intended for use as Calibration Standard for atomic spectrometry, spectrophotometry and other analytical techniques. Shake well before use and never pipette directly from the original container.

Precautions:

i) Excess sample must be rejected and must not be put back into the original bottle.
ii) Gloves, masks, goggles and other general precautionary measure should be used while handling the reference material.

Accreditation: Sabiha Research And Development ltd. is accredited to *ISO/IEC 17025:2017.*

Do not freeze, store the bottle tightly closed between 15 - 25ºC at room temperature protected from light, keep container tightly closed. Do not put back unused solution into original bottle. For laboratory and industrial use only, not for Human/Animal consumption.

QC Supervisor
*Sign*_____