



## Certificate of Analysis.

### Tin (Sn) ICP standard solution 10000 ppm in HNO<sub>3</sub>/HF, Traceable to NIST.

Product Code:	<b>BS13677.</b>
Description:	<b>Tin (Sn) ICP standard solution 10000 ppm in HNO<sub>3</sub>/HF, Traceable to NIST.</b>
Chemical Name:	<b>NA.</b>
Pack Size:	<b>100 ml.</b>
CAS NO.:	<b>NA.</b>
Mol. Weight:	<b>NA.</b>
Mol. Formula:	<b>NA.</b>
Solubility:	<b>Miscible in water.</b>
pH:	<b>NA.</b>
Accuracy:	<b>± 5%.</b>
Storage:	<b>Store at ambient temperature.</b>
LOT NO.:	<b>Sample.</b>
Manufacture Date:	<b>Lot specific.</b>
Expiry Date:	<b>2 years.</b>

Characteristics	Specification	Measured Values
Appearance:	Clear colourless liquid.	<b>Lot specific.</b>
Odour:	Odourless.	<b>Lot specific.</b>
Composition:	9500-10500 ppm @ 25°C.	<b>Lot specific.</b>

Note: - This material is only for laboratory purpose and not for human consumption.

#### **Certification & Traceability:**

This product was manufactured, processed and/or certified under a quality management system that is accredited **ISO 17034:2016 and ISO/IEC 17025:2017**. This product was prepared to the certified concentrations shown above by gravimetric methods and analysed using “High Performance ICP-OES” protocol developed by NIST and is directly traceable to **NIST SRM**.

The solution was diluted with filtered (0.22 µm), 18 M-ohm deionized water and stabilized with the appropriate high-purity acid as indicated in the matrix. The balances used in the preparation of this product are calibrated regularly, using a calibration provider that is accredited to **ISO/IEC 17025**. All standard components used in the manufacture of this product are pre-qualified and verified before use. All volumetric dilutions are performed in Class A calibrated glassware.



Tests were performed for capacity, readability, repeatability and linearity. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRM**. This product is manufactured, packaged, stored, and shipped in accordance with good manufacturing practices that is certified to **WHO-GMP**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of **k=2**.

#### **Validity Period:**

Briti Scientific standards ensures the accuracy of this product for 2 years from the manufacture date given above, provided the instructions for use are followed.

#### **Quality Certifications:**

This product was prepared under a quality management system that is accredited to the following:

**ISO 17034:2016** Accredited: Reference Materials Producer, CGI Certificate No. WGMP/22N2594 – General Requirements for the Competence of Reference Material Producers.

**ISO 17034** references additional requirements specified in ISO Guide 31 and ISO Guide 35.

**ISO/IEC 17025:2017** Accredited: Chemical Testing, CGI Certificate No. UG/23N256- General Requirements for the Competence of Testing and Calibration Laboratories.

**ISO 9001:2015** Certified: Quality Management Systems, CGI Certificate No. QMS/23N258.

**WHO-GMP** Certified: Good Manufacturing Practices, CGI Certificate No. WGMP/22N2594.

#### **Homogeneity:**

This product was determined to be homogenous by procedures consistent with the requirements of **ISO 17034** and **ISO Guide 35**. Replicate samples of the finished solution were analysed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability.

#### **Health and Safety Information:**

Refer to the Safety Data Sheet (SDS), which can be obtained at [www.britisscientific.com](http://www.britisscientific.com).



This certificate shall not be reproduced except in full, without written approval from Briti Scientific. This is a computer generated COA, no stamp or signature is required.



**Dr.K. Deepti.**  
**Technical Head.**

