

Certificate of Analysis

Sodium chloride reference standard traceable to NIST, AnStan®.

Product Code:	BS10197.
Description:	Sodium chloride reference standard traceable to NIST, AnStan®.
Synonym:	Sodium Chloride.
Pack Size:	100 gm.
CAS No.:	7647-14-5.
Mol. Weight:	58.44 g/mol.
Mol. Formula:	NaCl.
MDL Number:	MFCD00003477.
Melting point:	800 °C.
Boiling point:	1461 °C.
Density:	2.17 g/cm³.
Solubility:	Soluble in water.
Storage:	Store at ambient temperature.
Batch No:	BS10197/09.
Manufacture Date:	31/12/2025.
Expiry Date:	30/12/2030.

Characteristics	Specification	Result
Appearance (Colour):	White.	White.
Appearance (Form):	powder to crystal.	Crystal.
Insoluble matter:	Max. 0.003%.	0.0005%.
pH (5% aq. solution):	5.0 - 8.0.	6.9.

Assay by titration:	99.98% (U = ± 0.010%, k = 2).
---------------------	--------------------------------------

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

NaCl

Certification & Traceability:

This product was manufactured, processed and/or certified under a quality management system that complies with **ISO 17034:2016** and **ISO/IEC 17025:2017**.

The balances used in the preparation of this product are calibrated regularly, using a calibration provider that complies with **ISO/IEC 17025**. All standard components used in the manufacture of this product are pre-qualified and verified before use. This product was analysed according to protocol developed by NIST and is directly traceable to **NIST SRM919b**.

Tests were performed for capacity, readability, repeatability and linearity. 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**.

The combined uncertainty u is derived from combination of the squared uncertainty contributions:

$$U = k \times \sqrt{u^2 \text{Characterisation} + u^2 \text{Homogeneity} + u^2 \text{Stability}}$$

uCharacterisation:

is the uncertainty in accordance with ISO/IEC 17025 which includes the contributions of the primary reference material and the measuring system.

uHomogeneity:

is the between-bottle variation in accordance with ISO 17034. The assessment of homogeneity is performed by analysis of a representative number of systematically chosen sample units.

uStability:

is the uncertainty obtained from short-term and long-term stability in accordance with ISO 17034. The stability studies are the basis for the quantification of the expiry date of this reference material for the unopened bottle.

Validity Period:

Briti Scientific standards ensure the accuracy of this product for 5 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 complies with the following:

ISO 17034:2016: 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: 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.


Health and Safety Information:

Refer to the Safety Data Sheet (SDS), which can be obtained at 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.



N.S. Mallika.
Quality Control.



D. Manga Raju.
Quality Assurance.