

Certificate of Analysis

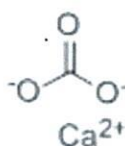
Calcium carbonate reference standard traceable to NIST, AnStan®.

Product code:	BS11327.
Description:	Calcium carbonate reference standard traceable to NIST, AnStan®.
Synonym:	Calcium carbonate.
Pack:	100 gm.
CAS NO.:	471-34-1.
Mol. Weight:	100.09 g/mol.
Mol. Formula:	CaCO₃.
MDL Number:	MFCD00010906.
Solubility:	Soluble in H₂O:HCl (13:2).
Storage:	Store at room temperature.
Batch No:	BS11327/10.
Manufacture Date:	01/04/2026.
Expiry Date:	30/03/2031.

Test	Specification	Measured Values
Appearance (Colour):	White.	White.
Appearance (Form):	Powder.	Powder.
Identification by MASS:	Confirms to the structure.	Confirms to the structure.
Identification by IR:	Confirms to the structure.	Confirms to the structure.

Assay by titration:	99.94% (U = ± 0.02%, k = 2).
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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 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 SRM 915b**.

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:

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

$u_{\text{Characterisation}}$: is the uncertainty in accordance with ISO/IEC 17025 which includes the contributions of the primary reference material and the measuring system.

$u_{\text{Homogeneity}}$: 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.

$u_{\text{Stability}}$: 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.

Drying Instructions: Dry the material at 200 °C to 210 °C for 4 h. After it has been dried, store it in a desiccator over anhydrous magnesium perchlorate.

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: **17034:2016:** Reference Materials Producer, CGI Certificate No. UG/25540 – 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. EU/26344- General Requirements for the Competence of Testing and Calibration Laboratories.

ISO 9001:2015 Certified: Quality Management Systems, CGI Certificate No. QMS/26343.

WHO-GMP Certified: Good Manufacturing Practices, CGI Certificate No. WGMP/25541.

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.britishtscientific.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.


K.S. Rao.
Quality Assurance.



Agilent

MASS REPORT

Sample details

Sample name: BS11327-10

Sequence Name: 01-04-2026015

Instrument: SA/AD/INS/013

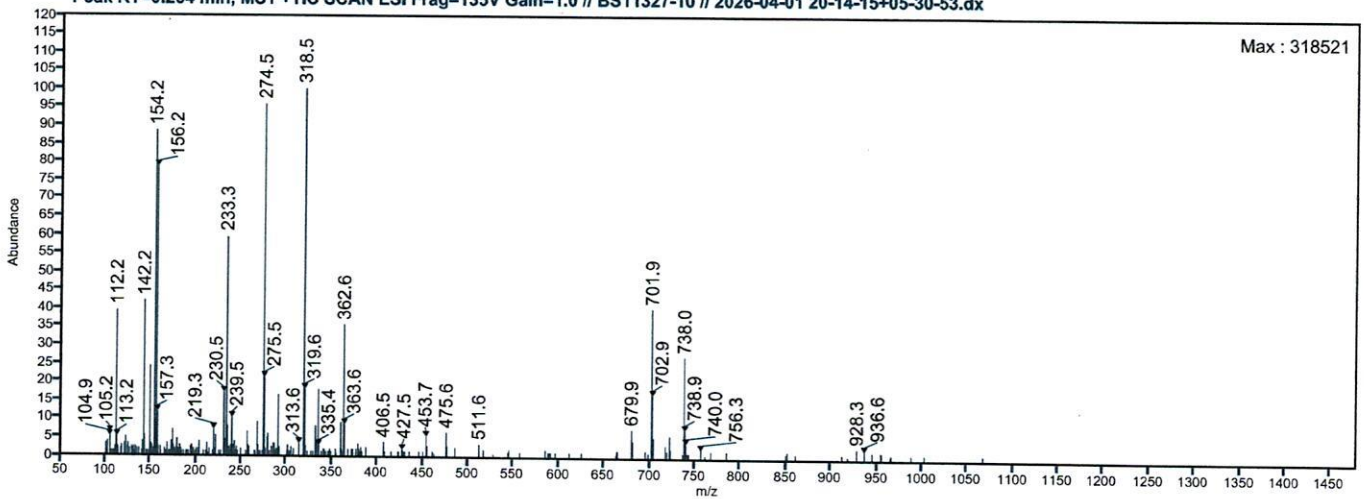
Location: 50

Acquired on: 4/1/2026 8:15:37 PM

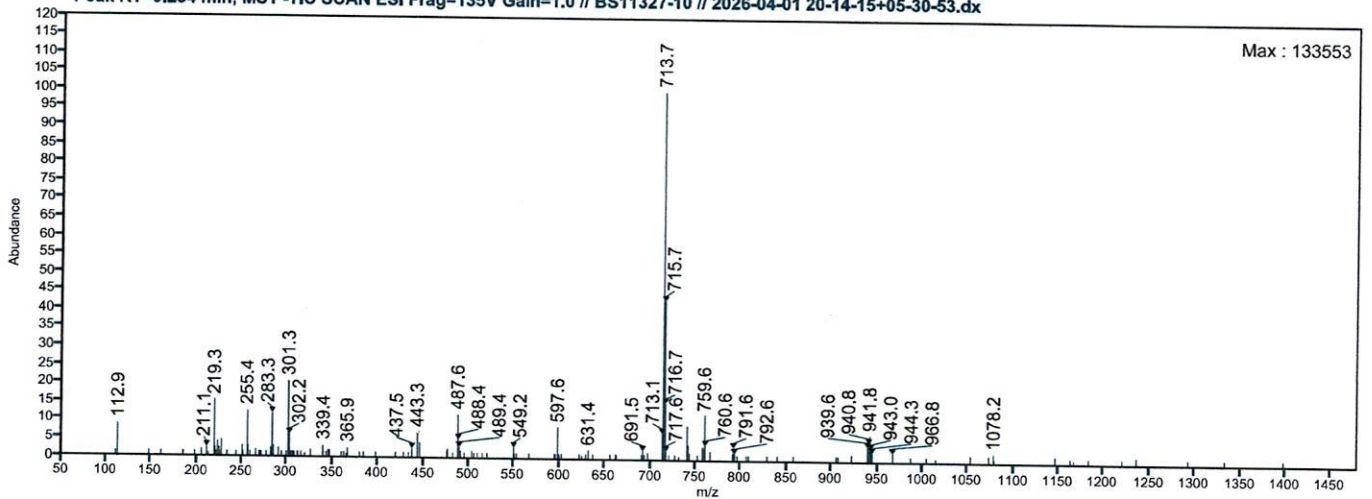
Inj. volume: 4.000

MS Spectrum

Peak RT=0.264 min, MS1 +TIC SCAN ESI Frag=135V Gain=1.0 // BS11327-10 // 2026-04-01 20-14-15+05-30-53.dx



Peak RT=0.254 min, MS1 -TIC SCAN ESI Frag=135V Gain=1.0 // BS11327-10 // 2026-04-01 20-14-15+05-30-53.dx

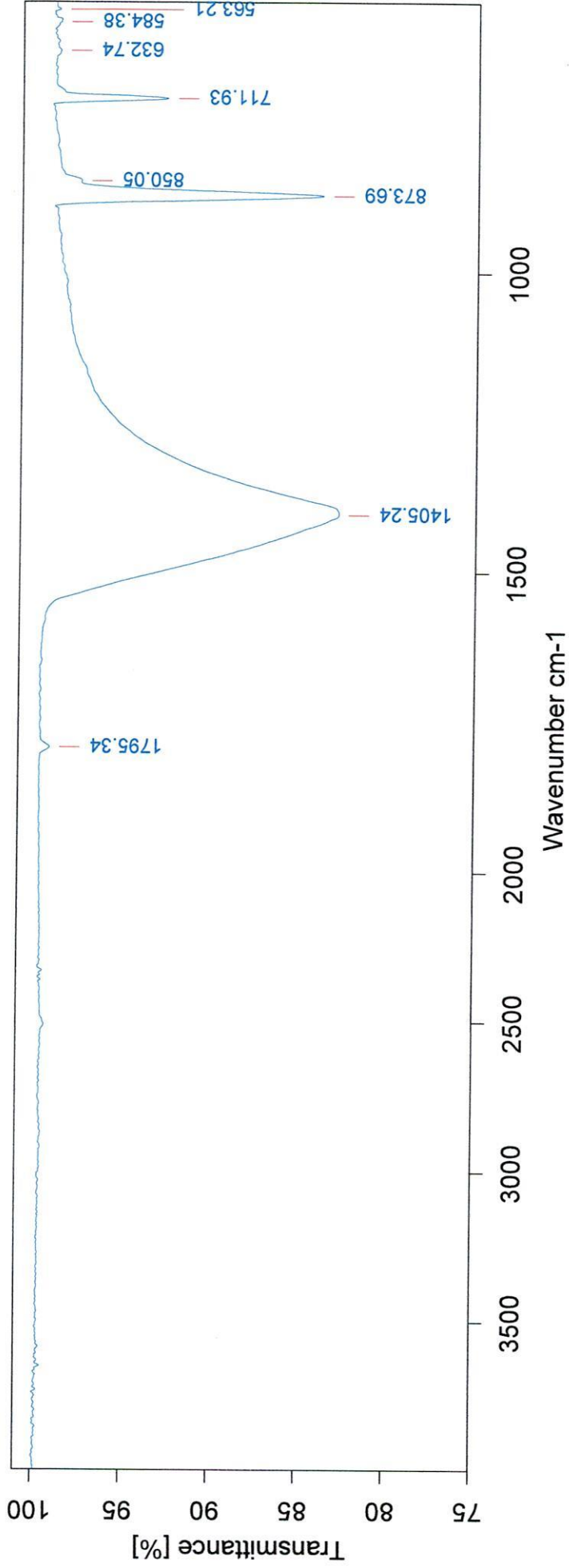


Asw
01/04/2026

01/04/2026

Instrument ID No: SA/AD/INS/019

INFRARED SPECTRUM



Path/File Name: D:\2026\APRIL - 2026\BS11327-10.0

Sample Name: BS11327-10

Lot No./Batch No: BS11327-10

Date & Time: 4/1/2026, 10:40:16 PM

Operator Name: SPARK

Experiment: APRIL-2026.XPM

Resolution: 2

Sample Scans: 16

Frequency Range: 4000 to 550

SP
01/04/2026

4/1/2026 10:41:39 PM

SP
01/04/2026

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Peak Table TR

Peak Picking

Peak Picking Values

Method: Standard

Searched for minima: Yes

Number of peaks: 8

Sensitivity > [%]: 10.000000

From: 4000.000000

to: 400.000000

Absolute peak height > 0.000000

Relative peak height < [%] 0.000000

Absolute peak height < 0.000000

Wavenumber	Abs. intensity	Rel. intensity	Width	Found if threshold < Shoulder
1405.2365	0.828	0.166	161.5852	96.336540
873.6913	0.838	0.154	17.3295	89.618172
711.9290	0.927	0.066	10.2434	37.993526
1795.3368	0.992	0.006	13.6105	102.233574
850.0524	0.976	0.001	40.7806	0.225381
584.3759	0.988	0.001	7.8314	6.505136
632.7446	0.989	0.003	14.4991	22.640974
563.2111	0.989	0.003	4.8887	49.299469

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BS11327-10

BS11327-10

Afr
01/04/2026

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