Elemental Microanalysis Ltd

Certificate of Analysis

Standard for TIC/TOC/ROC Analysis

Cat No. B2293 - Certificate no. 462425

General

This analytical standard consists of a homogenous batch of synthetically prepared material for use as a routine working laboratory control standard in the determination of TOC (total organic carbon), ROC (residual oxidizable carbon) and TIC (total inorganic carbon).

The analyses have been conducted according to DIN 19539/EN 17505 whereby:

TOC = TOC₄₀₀ Organic carbon measured up to 400°C

ROC Residual oxidizable carbon

TIC = TIC₉₀₀ Inorganic carbon measured 600 to 900°C

Values and Uncertainty

This synthetic material has been prepared gravimetrically. All standard components have been pre-verified before use. The results are derived from a round-robin interlaboratory test.

The uncertainty is expressed as k=1, 68% confidence limits (one standard deviation).

	TOC	ROC	TIC	TC (sum)
Gravimetric Preparation	2.00	2.00	2.00	6.00
Mean Found Value (% w/w)	2.03	1.71	2.22	5.97
SD (%)	0.25	0.10	0.16	0.24

Expiration

The values quoted are valid until 1st February 2035 within the measurement uncertainties specified. Should the sample become contaminated or altered in any way, the certification will be void.

Storage and use

This standard should be stored between 20°C to 25°C and should be kept tightly sealed away from light and moisture.

Information

The technical aspects involved in the preparation and issuance of this analytical standard were carried out by Elemental Lab, a division of Elemental Microanalysis, Okehampton, Devon EX20 1UB UK.

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For and on behalf of, Elemental Microanalysis Ltd A division of **Elemental**

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