

# Certificate of Analysis

Control Standard TOC/ROC/TIC to DIN 19539

Cat No. B2293 – Certificate no. 309445

## General

This Analytical Standard (OAS) 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 whereby:

TOC = TOC<sub>400</sub>    Organic carbon measured up to 400°C  
ROC                Residual oxidizable carbon  
TIC = TIC<sub>900</sub>    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.

Results shown are derived from an Interlaboratory (round-robin) exercise using equipment from a variety of manufacturers.

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

	<b>TOC</b>	<b>ROC</b>	<b>TIC</b>	<b>TC (sum)</b>
Gravimetric Preparation	2.00	1.80	2.00	5.80
Mean Found Value (% w/w)	2.24	1.69	1.93	5.85
S.D. (%)	0.17	0.21	0.05	0.05

## Expiration

The values quoted are valid until **1<sup>st</sup> April 2029** within the measurement uncertainties specified. Should the sample become contaminated or altered in any way, the certification will be void.

## Storage and use

This OAS 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 (In)Organic Analytical Standard (IAS/OAS) were carried out at Elemental Microanalysis Ltd, Okehampton, Devon EX20 1UB UK, Tel +44 1837 54446, Fax +44 1837 54544, Email [info@microanalysis.co.uk](mailto:info@microanalysis.co.uk).

Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no event shall Elemental Microanalysis Ltd be liable for incidental or consequential damages.

For and on behalf of  
Elemental Microanalysis Ltd

Jon Davies  
Technical Director