Elemental Microanalysis Ltd

Certificate of Analysis

Synthetic Chalky Soil OAS
Cat No. B2238 – Certificate No. 452221

General

This Organic Analytical Standard (OAS) consists of a homogenous batch of synthetic chalky soil standard for use as a routine working microanalytical standard for the determination of Carbon and Nitrogen.

Certified Values and Uncertainty

The uncertainty in the certified value is expressed as expanded uncertainty, U, at 95% confidence and is calculated in accordance with ISO/IEC17025 according to GUM (Guidelines to Uncertainty in Measurement). Confidence limits include those due to sampling variation, weighing, calibration and measurement errors. The certified values are based upon the results of 20 determinations.

The certified values for Carbon and Nitrogen were determined by elemental analyser calibrated to Cystine 143d from National Institute of Standards and Technology (NIST), Maryland, USA.

	Element	*Certified value (% w/w)*	*Uncertainty (+/- %)*
As bottled	**Carbon**	**5.47**	**0.16**
	Nitrogen	**0.37**	**0.03**
	Total inorganic Carbon	**(2.27)**	
	Total organic Carbon	**(3.20)**	

Expiration of Certification

The certification of this OAS is valid until 21 August 2027 within the measurement uncertainties specified.

Storage and use

This OAS should be stored between 20ºC to 25ºC and should be kept tightly sealed away from light and moisture. It is non-hygroscopic under normal conditions and can be used without preliminary drying.

Certification Information

Bracketed figures are not certified values and are provided for information only.
The technical aspects involved in the preparation, certification 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.

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For and on behalf of
Elemental Microanalysis Ltd

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