

Certificate of Analysis

Coal CHNS Standard
Cat. No B2324 ó Certificate no. 782614

General

This Organic Analytical Standard (OAS) consists of a homogenous batch of coal for use as a routine working micro-analytical standard for the determination of Carbon, Hydrogen, Nitrogen and Sulphur

Certified Values and Uncertainty

The uncertainty in the certified value is expressed as standard deviation () with a 95% confidence interval ($k=2$). Confidence limits include those due to sampling variation, weighing, calibration, and measurement errors.

The certified values are based upon the results of an Inter-laboratory analysis programme (ILAP).

The data for oxygen reported and enclosed by a parentheses () is NOT certified and given for information purposes only. The value given is a calculated value (oxygen by difference) in accordance with ASTM D3176.

Elemental Composition – Dry Weight Basis*

<i>Element</i>	<i>Certified value</i> (% w/w)	<i>Standard deviation (2σ)</i> (+/- %)
Carbon	60.65	0.82
Hydrogen	4.38	0.11
Nitrogen	1.15	0.11
Sulphur	6.18	0.14
(Oxygen	15.12	----

Expiration of Certification This CRM is valid for **two** years from date of opening.

Please record the date of opening / expiry HERE: _____

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.

*This material is hygroscopic should be dried to the following protocol:

The sample to be analysed should be oven dried for a minimum of 70 minutes at 107+/- 3 deg C until a steady mass is achieved.

Place in a desiccator and allow to cool to ambient temperature

For and on behalf of
Elemental Microanalysis Ltd

Jon Davies
Technical Manager

