

# Certificate of Analysis

Gelatin powder standard  
Cat. No. B2215 – Certificate No. 308034

## General

This Analytical Standard (OAS) consists of a homogenous batch of Gelatin(e) powder for use as a routine working laboratory standard in the determination of C, N, H, O and S and of the stable isotopes  $^{13}\text{C}$ ,  $^{15}\text{N}$ ,  $^{18}\text{O}$  and  $^{34}\text{S}$ .

This gelatin(e) is of fish origin. Those with a fish allergy should handle with appropriate care.

## Values and Uncertainty

The uncertainty in the quoted values is expressed as  $\sigma$  (1 standard deviation). Confidence limits include those errors due to sampling variation, weighing, calibration and measurement.

This material may be used in method development, performance monitoring or as part of a quality control programme.

Values are traceable to primary standards issued by N.I.S.T. and I.A.E.A Vienna.

*It is not intended for this to be a substitute for such primary standards.*

## Results (as bottled)\*

<b>Nitrogen</b>	<b>% = 16.55</b> $^{15}\text{N}_{\text{V-AIR}} = +4.26\text{‰}$	$\sigma = 0.10\%$ $\sigma = 0.12\text{‰}$
<b>Carbon</b>	<b>% = 43.78</b> $^{13}\text{C}_{\text{V-PDB}} = -22.92\text{‰}$	$\sigma = 0.15\%$ $\sigma = 0.10\text{‰}$
<b>Oxygen</b>	<b>% = 28.61</b> $^{18}\text{O}_{\text{V-SMOW}} = +6.76\text{‰}$	$\sigma = 0.15\%$ $\sigma = 0.20\text{‰}$
<b>Sulfur</b>	<b>% = 0.51</b> $^{34}\text{S}_{\text{V-CDT}} = +1.21$	$\sigma = 0.1\%$ $\sigma = 0.24\text{‰}$
<b>Hydrogen</b>	<b>% = 6.97</b>	$\sigma = 0.10\%$

## Expiration

The values quoted are valid until **10 March 2028** within the measurement uncertainties specified.

## Storage and Use

This OAS should be stored between 15°C to 25°C and should be kept tightly sealed away from light and moisture.

\*Data given above is based on the product “as bottled” with the exception below.

Samples for  $^{18}\text{O}$  determination should be thoroughly dried and stored in a dessicator prior to use.

## 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

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For and on behalf of  
Elemental Microanalysis Ltd

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