

# Certificate of Analysis

Cold water fish gelatin standard  
Cat. No. B2219 – Certificate No. 426932

## 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 and S and of the stable isotopes  $^{13}\text{C}$ ,  $^{15}\text{N}$  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

<b>Nitrogen</b>	<b>% = 16.63</b> $^{15}\text{N}_{\text{V-AIR}} = +14.71\text{‰}$	<b><math>\sigma = 0.12\%</math></b> <b><math>\sigma = 0.14\text{‰}</math></b>
<b>Carbon</b>	<b>% = 42.93</b> $^{13}\text{C}_{\text{V-PDB}} = -16.33\text{‰}$	<b><math>\sigma = 0.29\%</math></b> <b><math>\sigma = 0.10\text{‰}</math></b>
<b>Sulfur</b>	<b>% = 0.43</b> $^{34}\text{S}_{\text{V-CDT}} = +17.05$	<b><math>\sigma = 0.01\%</math></b> <b><math>\sigma = 0.07\text{‰}</math></b>
<b>Hydrogen</b>	<b>% = 6.86</b>	<b><math>\sigma = 0.14\%</math></b>

## Expiration

The values quoted are valid until **22 June 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.

## 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  
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