Elemental Microanalysis Ltd

Certificate of Analysis

Slightly Enriched Water ²H & ¹⁸O Water Standard - 30ml

Cat No. B2245 - Certificate no. 457382

General

This standard is intended to provide a water sample of known isotopic composition that can be used to calibrate instrumentation and normalise unknown water samples. It is a homogenous batch of fresh distilled and deionised water to which enriched waters have been added.

It is not intended as a substitute for the primary reference materials distributed by the IAEA.

Values and Uncertainty

The stable hydrogen and oxygen isotope values of this standard were determined by CF-IRMS using VSMOW2 and IAEA-607 for calibration. All samples were prepared by equilibration with hydrogen for δ^2H and carbon dioxide for $\delta^{18}O$.

The results quoted are based on 30 determinations. Uncertainty is expressed as one standard deviation (σ 1) from the mean value.

B2245 Slightly Enriched Water	$\delta^2 H \text{ v-smow (‰)}$	δ ¹⁸ O v-smow (‰)
	79.69 ± 1.50	10.28 ± 0.20

Storage

Once opened, this reference material should be stored carefully in a cool place with the lid done up tightly enough to avoid evaporation.

Information

Calibrated and bottled September 2024.

The technical aspects involved in the production of this reference material were carried out by Elemental Lab, a division of Elemental Microanalysis. Okehampton, Devon, EX20 1UB, UK. Tel +44 1837 54446. https://elementallab.co.uk/

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For and on behalf of, Elemental Microanalysis Ltd.

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