

Certificate of Analysis

Desert Water
 ^2H & ^{18}O Water Standard - 30ml

Cat No. B2244 – Certificate no. 456972

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 water from Saudi Arabia.

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, SLAP2 and GRESP for calibration. All samples were prepared by equilibration with hydrogen for $\delta^2\text{H}$ and carbon dioxide for $\delta^{18}\text{O}$.

The results quoted are based on 32 determinations. Uncertainty is expressed as one standard deviation (σ) from the mean value.

B2244	$\delta^2\text{H}$ v-SMOW (‰)	$\delta^{18}\text{O}$ v-SMOW (‰)
Desert Water	0.86 ± 1.22	0.43 ± 0.10

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/>

Email: enquiries@microanalysis.co.uk

For and on behalf of,
Elemental Microanalysis Ltd.

David Castle
R&D and Applications Specialist

