



The International Atomic Reference Material Agency

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Certificate of Analysis

DILUTED STANDARD SOLUTION

IARMA-015

TRITIUM (HYDROGEN-3) in DEAD WATER

Certified Value: Derived Massic Activity

CRM Code	Activity [Bq/kg]	Uncertainty [Bq/g]
IARMA-015	< 0.03	

*Certified value estimation is based on long term analysis and monitoring of water sampled from deep aquifer of thermal mineral water Rimske terme, Slovenia.

J. P. Doherty
Chief Executive Officer

Origin and preparation of the material

The IARMA-005 CRM is dead water sourced in deep aquifer of thermal mineral water from borehole VB-4, Rimske terme, Slovenia. The dead water IARMA-005 was distilled before shipment.

Homogeneity and Stability

The source of the dead water is a subject of a permanent study and control since 2022. Measurands of replicates are taken monthly, and H-3 was analysed using LSC after enrichment. All the observed measurement results of the studied dead water were below 0.03 Bq/kg which is the detection limit of the method.

Intended Use

This CRM is suitable for quality assurance and quality control purposes and for method development to monitor the background and/or contamination level in the system and for all aspects of analytical method validation, such as preparation of spike samples, and for training purposes.

Handling and Storage

Store the original unopened container at $[5 \pm 2]$ °C, protected from direct sunlight and sources of heat. Minimise evaporation, contamination and unnecessary opening.

Issue and expiry date

The issue date of this Certificate is 10-September-2026. Based on experience with similar materials and the performed stability study, the certified value for tritium is valid until 10-September-2031, provided the original bottle is handled and stored in accordance with the provided instructions.

Legal disclaimer

IARMA Limited makes no warranties, expressed or implied, with respect to the data contained in this Certificate, except to the extent required by applicable law or expressly stated herein. Users are responsible for ensuring that the material is suitable for their intended application and that the current version of this Certificate is used.

Compliance with ISO Guide 31:2000

The content of this Certificate is in compliance with the ISO Guide 31:2000: Reference materials - Content of certificates and labels.

Note

The certified value as stated in this Certificate may be updated if more information becomes available. Users of these CRMs should ensure that the Certificate in their possession is current. The current version can be found on the IARMA Limited website (<http://www.iarma.co.uk>). For further information regarding this material, please contact office@iarma.co.uk

END of the certificate