JOINT RESEARCH CENTRE
Directorate F – Health, Consumers and Reference Materials

CERTIFICATE OF ANALYSIS

ERM®- AC626

ARSENOBETAINE IN WATER		
	Mass Fraction	
	Certified value [1] [mg/kg]	Uncertainty [2] [mg/kg]
Arsenobetaine	250.0	2.5

1) Calculated taking into account the purity of the starting material and the gravimetric preparation of the solution. The certified value and its uncertainty are traceable to the International System of Units (SI).

2) The certified uncertainty is the expanded uncertainty with a coverage factor k = 2 corresponding to a level of confidence of about 95 % estimated in accordance with ISO/IEC Guide 98-3, Guide to the Expression of Uncertainty in Measurement (GUM:1995), ISO, 2008.

This certificate is valid for one year after purchase.

Sales date:

The minimum amount of sample to be used is 50 µg.

NOTE

European Reference Material ERM®-AC626 was produced and certified under the responsibility of the of the European Commission's Joint Research Centre according to the principles laid down in the technical guidelines of the European Reference Materials® co-operation agreement between BAM-IRMM-LGC. Information on these guidelines is available on the internet (http://www.erm-crm.org)..

Accepted as an ERM®, Geel, July 2017

Signed:

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DESCRIPTION OF THE MATERIAL

The CRM is available in amber glass ampoules containing 1 mL of arsenobetaine aqueous solution closed under argon atmosphere.

ANALYTICAL METHODS USED FOR CERTIFICATION

Quantitative nuclear magnetic resonance spectroscopy

High performance liquid chromatography-inductively coupled plasma-mass spectrometry

Ion chromatography with conductivity detection

Inductively coupled plasma-mass spectrometry

Inductively coupled plasma-sector field mass spectrometry

Headspace-gas chromatography-mass spectrometry

Karl Fischer titration

Gas chromatography-flame ionisation detection

Gas chromatography-mass spectrometry

PARTICIPANTS

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(accredited to ISO Guide 34 for production of certified reference materials, BELAC No. 268-RM)

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Universitat de Barcelona, Facultad de Química, Barcelona, ES

SAFETY INFORMATION

The usual laboratory safety precautions apply.

INSTRUCTIONS FOR USE AND INTENDED USE

The material is intended to be used as a calibrant and quality control sample.

The unit shall be shaken by repeatedly turning it upside down for at least 30 s before opening to ensure material re-homogenisation.

STORAGE

The materials shall be stored at 18 °C ± 5 °C in the dark.

However, the European Commission cannot be held responsible for changes that happen during storage of the material at the customer's premises, especially of opened samples.

LEGAL NOTICE

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NOTE

A detailed technical report is available https://crm.jrc.ec.europa.eu . A paper copy can be obtained from the Joint Research Centre Directorate F – Health, Consumers and Reference Materials on request.

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