EUROPEAN COMMISSION
JOINT RESEARCH CENTRE
Institute for Reference Materials and Measurements

# CERTIFIED REFERENCE MATERIAL
# BCR® – 479

## CERTIFICATE OF ANALYSIS

| SIMULATED FRESH WATER | | | |
|---|---|---|---|
| | Certified value [1] | Uncertainty [2] | Number of accepted sets of data p |
| Nitrate | | | |
| as amount of substance content | 214 µmol/kg | 4 µmol/kg | 16 |
| as mass fraction | 13.3 mg/kg | 0.3 mg/kg | 16 |

1) Unweighted mean value of the means of p accepted sets of data, each set being obtained in a different laboratory and/or with a different method of determination. The value is traceable to the International System of Units (SI).

2) Half-width of the 95 % confidence interval of the mean defined in [1].

This certificate is valid for one year after purchase.

Sales date:

The material is homogenous solution therefore no minimum amount to be used applies.

**NOTE**

This material has been certified by BCR (Community Bureau of Reference, the former reference materials programme of the European Commission). The certificate has been revised under the responsibility of IRMM.

Brussels, October 1994
Revised: November 2007

**Signed:** 

Prof. Dr. Hendrik Emons
Unit for Reference Materials
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## DESCRIPTION OF THE SAMPLE

The material consists of artificial freshwater with a relatively low level of nitrate stored in white glass ampoules, each containing approximately 100 ml. Additional information on the preparation, the certified and indicative values is given in the certification report.

## ANALYTICAL METHOD USED FOR CERTIFICATION

Differential pulse polarography
Ion chromatography
Visible light or UV spectrometry

## PARTICIPANTS

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## SAFETY INFORMATION

The usual laboratory safety precautions apply.

## INSTRUCTIONS FOR USE

The material is intended for quality control purposes, verification or validation of an analyticical procedure. The material is not intended for use as a calibrant.
The sample can be used as it is from the ampoule. It is recommended to shake the ampoule manually to remix evaporated and condensed water prior to taking a sub-sample. After opening the ampoule care should be taken to avoid contamination (use laminar flow benches or clean room facilities).

## STORAGE

Storage should take place at 18 °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.

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## NOTE

A technical report on the production of BCR®–479 is available on the internet (http://www.irmm.jrc.be). A paper copy can be obtained from IRMM on request.

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