



# CERTIFIED REFERENCE MATERIAL BCR<sup>®</sup> – 462

## CERTIFICATE OF ANALYSIS

COASTAL SEDIMENT			
	Mass fraction based on dry mass		Number of accepted sets of data p
	Certified value <sup>1)</sup> [µg/kg]	Uncertainty <sup>2)</sup> [µg/kg]	
Tributyltin	54	15	5
Dibutyltin	68	12	7
<p>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).</p> <p>2) The certified uncertainty is the expanded uncertainty estimated in accordance with the Guide to the Expression of Uncertainty in Measurements (GUM) with a coverage factor k = 2, corresponding to a level of confidence of about 95 %.</p>			

This certificate is valid for one year after purchase.

Sales date:

The minimum amount of sample to be used is 500 mg.

### 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, April 1998

Revised: May 2007

Signed: \_\_\_\_\_

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## DESCRIPTION OF THE SAMPLE

The material consists of a dried sediment powder in a glass bottle. The bottle contains about 25 g of powder. Additional information on the preparation and the certified values is given in the certification report.

## ANALYTICAL METHOD USED FOR CERTIFICATION

Gas chromatography/quartz furnace atomic absorption spectrometry  
Gas chromatography/flame photometric detection  
Gas chromatography/mass spectrometry  
Gas chromatography/microwave induced plasma emission spectrometry  
Gas chromatography/inductively coupled plasma mass spectrometry  
High performance liquid chromatography/inductively coupled plasma mass 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 analytical procedure. The material is not intended for use as a calibrant.

The sample can be used as it is from the bottle. Before a bottle is opened, it should be shaken manually for five minutes so that the material is re-homogenised. The correction to dry mass should be made on a separate portion of 1 g which should be dried in an oven at 102  $\pm$  2 °C for 3 - 4 h (successive weighings should not differ by more than 0.2 mg). The tightly closed bottles must be kept at - 20 °C in the dark for long term storage periods.

## STORAGE

Storage should take place at - 20 °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<sup>®</sup>-462 is available on the internet (<http://www.irmm.jrc.be>). A paper copy can be obtained from IRMM on request.