



# CERTIFIED REFERENCE MATERIAL BCR<sup>®</sup> – 663

## CERTIFICATE OF ANALYSIS

SAXITOXIN IN ACETIC ACID (0.2 mol/L)		
	Mass Fraction	
	Certified value <sup>1)</sup> [mg/kg]	Uncertainty <sup>2)</sup> [mg/kg]
Saxitoxin-2 HCl	9.8	1.2

1) This value is based on the preparation procedure and is traceable to the International System of Units (SI).  
2) The certified uncertainty is the standard uncertainty estimated in accordance with the Guide to the Expression of Uncertainty in Measurement (GUM) with a coverage factor  $k = 1$ , corresponding to a level of confidence of about 66 % comprising contributions from the purity determinations of the saxitoxin calibrants used and the uncertainties of the measurements to determine the saxitoxin mass fraction.

This certificate is valid for one year after purchase.

Sales date:

The material is a true solution and can therefore be considered perfectly homogeneous.

### 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  
Latest revision: April 2009

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

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## DESCRIPTION OF THE SAMPLE

This material is an acetic acid solution (0.2 mol/L), containing saxitoxin-2 HCl. BCR<sup>®</sup>-663 is supplied in sealed ampoules in amounts of 1 mL. Each ampoule contains enough material to enrich 25 g of fresh mussel material to obtain saxitoxin-positive mussel material. The whole contents of an ampoule must be used at once. (See section 10.2.2.2 of the certification report).

## ANALYTICAL METHOD USED FOR CERTIFICATION

The solution was gravimetrically prepared and the mass fraction was confirmed by means of instrumental determination by HPLC with fluorescence detection, using a well-characterized saxitoxin calibrant (STX-1, NRC Canada).

## PARTICIPANTS

- Departamento de Química Orgánica y Sección de Alcaloides del CSIC, Universidad de Santiago de Compostela (ES)
- Laboratory for Residue Analysis, National Institute of Public Health and the Environment, Bilthoven (NL)
- Standards, Measurements and Testing Programme (SMT), European Commission, Brussels (BE)

## SAFETY INFORMATION

- R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.  
S23: Do not breathe vapour.  
S24/25: Avoid contact with skin and eyes.  
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.  
S26/28: S26: In case of contact with skin or eyes, rinse immediately with plenty of water and seek medical advice.  
S46: If swallowed, seek medical advice immediately and show the container or label.

## INSTRUCTIONS FOR USE

Saxitoxin solution BCR-663 (containing saxitoxin and dc-saxitoxin) may be used to enrich blank mussel material (BCR-543) to obtain saxitoxin-positive mussel material. After opening the ampoule, the material must be quantitatively added to 25.0 gram of blank mussel material BCR-543. (See section 10.2.2.2 of the certification report.)

**NOTE: To remove the content of an ampoule quantitatively, rinse the ampoule several times with water and add the rinsing water to the BCR-543.**

## STORAGE

Samples should be stored at 4 °C. 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>-663 is available on the internet (<http://www.irmm.jrc.be>). A paper copy can be obtained from IRMM on request.