



# CERTIFIED REFERENCE MATERIAL BCR-102

## CERTIFICATE OF ANALYSIS

TUNGSTEN CARBIDE POWDER			
	Mass Fraction		Number of accepted sets of data p
	Certified value <sup>1)</sup> [µg/g]	Uncertainty <sup>2)</sup> [µg/g]	
Oxygen	185	4	5
<sup>1)</sup> Unweighted mean value of the means of p sets of data, each set being obtained with one method in one laboratory. The certified values are traceable to the SI. <sup>2)</sup> This is the 95 % confidence interval of the certified value as defined in 1).			

This certificate is valid for three years after purchase.

Sales date:

The minimum amount of sample to be used is 0.5 g.

### 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, June 1985

Revised: May 2007

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

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## DESCRIPTION OF THE SAMPLE

The material is available as 2-3 g portions of a powder (with a particle size of 5-8 µm) in bottles, each bottle sealed under argon in an aluminium container.

## ANALYTICAL METHOD USED FOR CERTIFICATION

- Reducing fusion followed by thermal conductivity measurement, infrared spectrometry, gas chromatography or coulometric titration
- Helium-3 activation analysis

## PARTICIPANTS

- CEA-CEN, Grenoble (FR)
- European Commission, Joint Research Center, Central Bureau for Nuclear Measurements, Geel (BE)
- Krupp Forschungsinstitut, Essen (DE)
- Max-Planck Institut für Metallforschung, Schwäbisch Gmünd (DE)
- Metallwerk Plansee GmbH, Reutte (AT)
- Rijksuniversiteit Gent, Instituut voor Nucleaire Wetenschappen, Gent (BE)

## SAFETY INFORMATION

Particle 10 µm or less in diameter can enter deeply into the respiratory system when inhaled. Precautions must be taken accordingly when manipulating this CRM.

## INSTRUCTIONS FOR USE

The stated uncertainty is valid when the reference material is used for calibration purposes. When the material is used to assess the performance of an analytical procedure, the user should refer to the recommendations laid down in the chapter "Instructions for Use" of the certification report. It is recommended to analyse the samples directly after opening the containers.

## STORAGE

The sealed bottles might be stored at 18 °C. 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-102 is available on the internet (<http://www.irmm.jrc.be>). A paper copy can be obtained from IRMM on request.