



CERTIFIED REFERENCE MATERIAL BCR[®] – 017

CERTIFICATE OF ANALYSIS

| COPPER | | | |
|---|--|--------------------------------------|-----------------------------------|
| | Mass fraction | | Number of accepted sets of data p |
| | Certified value ¹⁾ [mg/kg] | Uncertainty ²⁾ [mg/kg] | |
| S | 10.4 | 0.6 | 8 |
| P | 6.85 | 0.29 | 9 |
| <p>1) The certified value is the unweighted mean value of p sets of data, each set being obtained in a different laboratory and/or with a different method. The certified values are traceable to the International System of Units (SI).</p> <p>2) The uncertainty is taken as the half-width of the 95 % confidence interval of the mean defined in 1).</p> | | | |

This certificate is valid for five years after purchase.

Sales date:

The minimum amount of sample to be used for form B is 0.3 g.

DESCRIPTION OF THE SAMPLE

The material is available in two forms:

BCR-017A: disks of 42 mm diameter and 30 mm thickness (approx. 0.37 kg)

BCR-017B: chips in bottles containing approx. 50 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, March 1989

Latest revision: August 2015

Signed:

Prof. Dr. Hendrik Emons
European Commission
Joint Research Centre
Institute for Reference Materials and Measurements
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ANALYTICAL METHOD USED FOR CERTIFICATION

Charged particle activation analysis
Reducing dissolution followed by spectrophotometry as methylene blue
Reducing dissolution followed by titration
Combustion followed by conductimetry
Combustion followed by titration
Spectrophotometry as molybdenum blue
Neutron activation analysis
Ion chromatography

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SAFETY INFORMATION

The usual laboratory safety precautions apply.

INSTRUCTIONS FOR USE

The chips should be analysed without prior cleaning. The disks should be cleaned mechanically as is usual for spark emission spectrometry after the first use.

STORAGE

The material can be stored at room temperature.
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[®]-017 is available on the internet (<http://www.irmm.jrc.be>). A paper copy can be obtained from IRMM on request.

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