



# CERTIFIED REFERENCE MATERIAL BCR<sup>®</sup> – 052

## CERTIFICATE OF ANALYSIS

BENZO[gh]PERYLENE			
	Mass fraction		Number of accepted sets of data p
	Certified value <sup>1)</sup> [g/g]	Uncertainty <sup>2)</sup> [g/g]	
Benzo[gh]perylene	0.9923	0.0021	75
<p>1) The certified value is the unweighted mean of the means of p accepted sets of results independently obtained by 9 laboratories. The certified 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 Measurement (GUM) with a coverage factor <math>k = 2</math>, 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 2.5 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, May 1980

Latest revision: May 2007

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

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EC-JRC-IRMM  
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## DESCRIPTION OF THE SAMPLE

The material is available in a brown glass bottle, containing 100 mg. To ensure safety during distribution, the bottle is encased in an aluminium container equipped with an aluminium screw cap.

## ANALYTICAL METHOD USED FOR CERTIFICATION

- Gas liquid chromatography (GLC)
- High performance liquid chromatography (HPLC)
- Mass spectrometry (GC/MS and direct inlet MS)

## PARTICIPANTS

- Biochemisches Institut für Umweltcarcinogene, Ahrensburg (DE)
- BP Research Centre, Sunbury-on-Thames (GB)
- Bundesanstalt für Materialprüfung (B.A.M.), Berlin (DE)
- CNR, Laboratorio sull'Inquinamento Atmosferico, Roma (IT)
- Fysisch-Chemisch Instituut TNO, Zeist (NL)
- Istituto Superiore di Sanità, Roma (IT)
- European Commission, Joint Research Centre, CETIS, Ispra (IT)
- European Commission, Joint Research Centre, Institute for Energy (IE), Petten (NL)
- Laboratoire Central de la Préfecture de Police, Paris (FR)
- National Physical Laboratory, Teddington (GB)
- Organisch-Chemisch Instituut TNO, Utrecht (NL)

## SAFETY INFORMATION

For health protection reasons, the material must be handled with great care, especially avoiding skin contact, inhalation and ingestion.

## INSTRUCTIONS FOR USE

The reference material is intended for calibration of analytical apparatus, determination of retention times, response factor and reference spectra in chromatographic and spectrophotometric analysis. Solutions of reference material intended for calibration purposes shall be freshly prepared and not allowed to be exposed to light for extended periods. Calibration solutions are to be discarded after use, preferably into special waste containers to avoid contamination of ground or waste waters.

## STORAGE

The reference material shall be shielded from light and be stored in darkness at 4 °C to prevent photo-oxidation reactions.

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.

## LEGAL NOTICE

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## NOTE

A technical report on the production of BCR-052 is available on the internet (<http://www.irmm.jrc.be>). A paper copy can be obtained from IRMM on request.