



CERTIFIED REFERENCE MATERIAL BCR[®] – 459

CERTIFICATE OF ANALYSIS

COCONUT OIL		
	Mass fraction	Number of accepted sets of data p
	Certified value ¹⁾ [µg/kg]	
Pyrene	< 0.9	10
Chrysene	< 0.6	12
Benzo[k]fluoranthene	< 0.2	13
Benzo[a]pyrene	< 0.3	12
Benzo[ghi]perylene	< 0.2	10
Indeno[1,2,3-cd]pyrene	< 0.2	9
1) With a probability of 95 % the certified value is below this level. Details can be found in Section 7.6 of the certification report. The value is traceable to the International System of Units (SI).		

This certificate is valid for one year after purchase.

Sales date:

The minimum amount of sample to be used is 2 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, November 1996
Latest revision: May 2007

Signed: _____

Prof. Dr. Hendrik Emons
Unit for Reference Materials
EC-JRC-IRMM
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2440 Geel, Belgium

DESCRIPTION OF THE SAMPLE

This material is a highly refined coconut oil obtained from raw coconut oil. BCR[®]-459 is supplied in 50 ml brown glass ampoules containing approximately 45 g. Each ampoule is placed in a transparent polyethylene bag, the bag containing the ampoule is fixed in the can with insulation type foam and tightly packed in Vermiculite/ Firelite to serve as protective packing material.

ANALYTICAL METHOD USED FOR CERTIFICATION

The methods used for certification involved instrumental determination by high performance liquid chromatography and gas chromatography using a variety of separating and detection conditions. The methods varied in their initial extraction and clean-up procedures. Details of the methods used are given in the certification report.

PARTICIPANTS

- Biochemisches Institut für Umweltcarcinogene (BIU), Großhansdorf (DE)
- Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin (DE)
- Bundesanstalt für Fleischforschung, Kulmbach (DE)
- CARSO Centre d' Analyse de Traces, Vernaion (FR)
- Chemisches Untersuchungsamt, Hagen (DE)
- Food Science Laboratory, Torry, Ministry of Agriculture Fisheries and Food, Aberdeen (GB)
- Inspectie Gezondheidsbescherming, Amsterdam (NL)
- Rijksinstituut voor Volksgezondheid en Milieu, RIVM, Bilthoven (NL)
- State Institute for Quality Control of Agricultural Products (RIKILT-DLO), Wageningen (NL)
- TNO Nutrition and Food Research Institute, Zeist (NL)
- Universitat De Barcelona, Department de Quimica Analitica, Barcelona (ES)
- Universita Di Perugia, Dipartimento Di Biologia Molecolare E Cellulare, Perugia (IT)
- Unilever Research Laboratory, Colworth, Bedford (GB)
- Unilever Research Laboratory, Vlaardingen (NL)

SAFETY INFORMATION

The usual laboratory safety precautions apply.

INSTRUCTIONS FOR USE

The material is intended to serve as an analytical blank:

- a) to establish recovery values for a method of analysis at various levels of contamination, through spiking
- b) to check the specific underground level of the laboratories methods.

The laboratory must judge whether the given limit of the respective polycyclic aromatic hydrocarbon is sufficient for its purposes.

STORAGE

Samples can be stored unopened at – 20 °C. After opening, the material should be used on the same day.

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[®]-459 is available on the internet (<http://www.irmm.jrc.be>). A paper copy can be obtained from IRMM on request.