



CERTIFIED REFERENCE MATERIAL BCR[®] – 666

CERTIFICATE OF ANALYSIS

LUNG TISSUE			
	Number of Asbestos fibres based on dry mass of tissue		Number of accepted sets of data p
	Certified value ¹⁾ [million/g]	Uncertainty ²⁾ [million/g]	
Amosite + crocidolite	2.3	0.9	7
Anthophyllite	5.1	1.5	7
<p>1) This value expressed as millions of fibres of more than 1 µm in length per g of dry tissue is the unweighted mean of p accepted (unweighted) mean values, independently obtained by 7 laboratories. The certified values are traceable to the SI.</p> <p>2) The uncertainty is taken as the half width of the 95% confidence interval of the mean of means.</p>			

This certificate is valid for one year after purchase.

Sales date:

The minimum amount of sample to be used is 10 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, October 2000
Latest revision: November 2007

Signed: _____

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DESCRIPTION OF THE SAMPLE

The sample consists of at least 100 mg of homogenised human lung tissue. Information on sample preparation is given in the report.

ANALYTICAL METHOD USED FOR CERTIFICATION

Amosite or crocidolite and anthophyllite fibers of more than 1 µm in length were counted, after sample ashing or digestion with KOH or NaOCl, by scanning electron microscopy, scanning transmission or transmission electron microscopy with selected area electron diffraction or energy dispersive x-ray spectrometry for the determination of the fibre composition.

PARTICIPANTS

- Finnish Institute of Occupational Health, Aerosol Laboratory, Helsinki (FI)
- Health and Safety Laboratory, Sheffield (GB)
- Hôpital Erasme, Cliniques Universitaires de Bruxelles, Brussels (BE)
- Hospital Germans Trias i Pujol, Badalona (ES)
- Institut und Poliklinik für Arbeits- und Sozialmedizin, Justus-Liebig-Universität, Giessen (DE)
- Laboratoire d'Etude des Particules Inhalées, Paris (FR)
- University of Oulu, Institute of Electron Optics, Oulu (FI)
- University of Wales, School of Engineering, Cardiff (GB)

SAFETY INFORMATION

The inhalation of powder dust should be avoided during the handling of the material. The material has been gamma irradiated at 25 kGy for sterilisation.

INSTRUCTIONS FOR USE

Before opening the bottle, it should be shaken manually. The water content is below 3 % by mass and already opened bottles should be dried for 24 h in a desiccator.

STORAGE

The bottles should be kept closed below or at ambient temperature in a dry place. 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[®]-666 is available on the internet (<http://www.irmm.jrc.be>). A paper copy can be obtained from IRMM on request.