



Fraunhofer

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CERTIFICATE

Hannover,
May 4, 2001

The biopersistence of fibres was investigated after short-term exposure by inhalation in the following study:

Fraunhofer ITA study no.: 02G97008
Test substance: Insulfrax
Sponsor: European Ceramic Fibres Industry Association
Title: The biopersistence of ceramic fibres in rats after short-term inhalation

This animal study was conducted in compliance with the Principles of Good Laboratory Practice (German Chemicals Law § 19a Appendix 1 pp. 1724-1732, July 25, 1994, which is in accordance with the corresponding OECD-Principles of Good Laboratory Practice). The preliminary protocol of the European Commission (ECB/TM 26 Rev. 5, 1997) was followed. The inhalation was performed in June 1997.

Following halftimes were calculated according to the EU protocol:

Long fibres fraction (length > 20 µm, L/D>3/1): 7 days (95% confidence limit 6 - 9 days)
WHO fibre fraction (L>5 µm, D<3µm, L/D>3/1): 17 days (95% confidence limit 15 - 19 days)

Prof. Dr. Uwe Heinrich
Managing director of Fraunhofer ITA

Dr. Bernd Bellmann
Study director