Mica

Toxicological Data on the Unburnt Ingredient

Mica following ip injection in mice provoked acute inflammation in omentum. There was considerable transport of dust from peritoneal cavity to liver lymph nodes & tracheobronchial lymph nodes provoking slight reticulinosis. [Sahu et al; Indian J Exp Biol 16 (2): 198 (1978)]

Following intratracheal inoculation in mice pulmonary fibrogenic response was investigated. Dust incited acute inflammatory reaction & many cholesterol cleft-like structures together with marked fibroblastic activity & lymphocytic infiltration. [Sahu et al; Exp Pathol (Jena) 16 (1-6): 276 (1978)]

With cell test system, macrophage-like cells (p388 d1), kaolin & mica (r= 0.58) showed significant positive correlations with cytotoxicity for high-rank coal dusts but not for low. [Gormley et al; Br J Exp Pathol 60 (5): 526 (1979)]

Studies were conducted/ of guinea pigs in which animals were sacrificed and examined 14, 45, and 90 days after receiving a single ip injection of 2 ml of a 5% suspension of mica dust in saline. Nodules produced by the dust on the anterior abdominal walls became flattened with irregular edges as the interval between injection and gross examination increased. [American Conference of Governmental Industrial Hygienists, Inc. Documentation of the Threshold Limit Values and Biological Exposure Indices. 6th ed. Volumes I, II, III. Cincinnati, OH: ACGIH, 1991., p. 1047]

References

American Conference of Governmental Industrial Hygienists, Inc. Documentation of the Threshold Limit Values and Biological Exposure Indices. 6th ed. Volumes I, II, III. Cincinnati, OH: ACGIH, 1991., p. 1047

Gormley et al; Br J Exp Pathol 60 (5): 526 (1979)]

Sahu et al; Indian J Exp Biol 16 (2): 198 (1978)]

Sahu et al; Exp Pathol (Jena) 16 (1-6): 276 (1978)]