

## ERIONITE (Group 1)

### A. Evidence for carcinogenicity to humans (*sufficient*)

Descriptive studies have demonstrated very high mortality from malignant mesothelioma, mainly of the pleura, in three Turkish villages where there was contamination from erionite and where exposure had occurred from birth<sup>1</sup>.

### B. Evidence for carcinogenicity to animals (*sufficient*)

Erionite has been tested in mice by intraperitoneal injection and in rats by inhalation, intrapleural and intraperitoneal administration, producing high incidences of mesotheliomas<sup>1,2</sup>.

### C. Other relevant data

Erionite fibres were identified in lung tissue samples in cases of pleural mesothelioma; ferruginous bodies were found in a much higher proportion of inhabitants in contaminated villages in Turkey than in those of two control villages<sup>1</sup>.

No data were available on the genetic and related effects of erionite in humans. It induced unscheduled DNA synthesis in human cells *in vitro* and transformation and unscheduled DNA synthesis in mouse C3H 10T1/2 cells<sup>3</sup>.

## References

<sup>1</sup>IARC Monographs, 42, 225-239, 1987

<sup>2</sup>Pott, F. (1987) The fibre as a carcinogenic agent (Ger.). *Zbl. Bakt. Hyg. B*, 184, 1-23

<sup>3</sup>IARC Monographs, Suppl. 6, 291-292, 1987