

## CHLOROPRENE (Group 3)

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

In one study, an excess of lung and skin cancers was related to occupational exposure to chloroprene. In another investigation, no excess of lung or other type of cancer was reported among chloroprene workers. There is one case report of an angiosarcoma of the liver in a worker exposed to chloroprene<sup>1</sup>.

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

A number of experimental studies were considered to be inadequate for an evaluation of the carcinogenicity of chloroprene<sup>1</sup>. In a further study<sup>2</sup> in which chloroprene was given orally to pregnant rats and their offspring were treated for life by stomach tube, the total incidence of tumours was similar in treated and untreated animals.

### C. Other relevant data

An increased incidence of chromosomal aberrations was found in the lymphocytes of workers exposed to chloroprene<sup>3</sup>.

Chloroprene induced dominant lethal mutations in rats and chromosomal aberrations in bone-marrow cells of mice treated *in vivo*. It induced transformation in one hamster cell line but did not induce mutation in Chinese hamster cells. It induced sex-linked recessive lethal mutations in *Drosophila* and was mutagenic to bacteria<sup>3</sup>.

## References

<sup>1</sup>IARC Monographs, 19, 131-156, 1979

<sup>2</sup>Ponomarev, V. & Tomatis, L. (1980) Long-term testing of vinylidene chloride and chloroprene for carcinogenicity in rats. *Oncology*, 37, 136-141

<sup>3</sup>IARC Monographs, Suppl. 6, 164-165, 1987