

3,4-EPOXY-6-METHYLCYCLOHEXYLMETHYL 3,4-EPOXY-6-METHYLCYCLOHEXANE CARBOXYLATE

Data were last reviewed in IARC (1976) and the compound was classified in *IARC Monographs Supplement 7* (1987).

1. Exposure Data

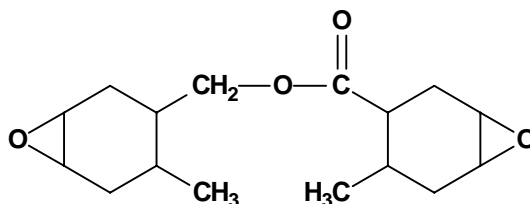
1.1 Chemical and physical data

1.1.1 Nomenclature

Chem. Abst. Serv. Reg. No.: 141-37-7

Systematic name: 4-Methyl-7-oxabicyclo[4.1.0]heptane-3-carboxylic acid, 4-methyl-7-oxabicyclo[4.1.0]hept-3-yl methyl ester

1.1.2 Structural and molecular formulae and relative molecular mass



$C_{16}H_{24}O_4$

Relative molecular mass: 280.4

1.1.3 Physical properties (for details, see IARC, 1976)

(a) *Boiling-point:* 215°C at 665 Pa

(b) *Conversion factor:* $\text{mg/m}^3 = 11.47 \times \text{ppm}$

1.2 Production and use

This chemical was produced by one company in the United States until 1965 for use in the manufacture of cured resins (IARC, 1976).

2. Studies of Cancer in Humans

No data were available to the Working Group.

3. Studies of Cancer in Experimental Animals

3,4-Epoxy-6-methylcyclohexylmethyl 3,4-epoxy-6-methylcyclohexane carboxylate was tested for carcinogenicity in mice by skin application: it produced skin carcinomas (IARC, 1976).

4. Other Data Relevant to an Evaluation of Carcinogenicity and its Mechanisms

No data were available to the Working Group.

5. Evaluation

No epidemiological data relevant to the carcinogenicity of 3,4-epoxy-6-methylcyclohexylmethyl 3,4-epoxy-6-methylcyclohexane carboxylate were available.

There is *limited evidence* in experimental animals for the carcinogenicity of 3,4-epoxy-6-methylcyclohexylmethyl 3,4-epoxy-6-methylcyclohexane carboxylate.

Overall evaluation

3,4-Epoxy-6-methylcyclohexylmethyl 3,4-epoxy-6-methylcyclohexane carboxylate is *not classifiable as to its carcinogenicity to humans (Group 3)*.

6. References

- IARC (1976) *IARC Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Man*, Vol. 11, *Cadmium, Nickel, Some Epoxides, Miscellaneous Industrial Chemicals and General Considerations on Volatile Anaesthetics*, Lyon, pp. 147–151
- IARC (1987) *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans*, Supplement 7, *Overall Evaluations of Carcinogenicity: An Updating of IARC Monographs Volumes 1 to 42*, Lyon, p. 63