

## 1,2-BIS(CHLOROMETHOXY)ETHANE

Data were last reviewed in IARC (1977) and the compound was classified in *IARC Monographs Supplement 7* (1987).

### 1. Exposure Data

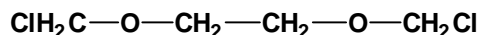
#### 1.1 Chemical and physical data

##### 1.1.1 Nomenclature

*Chem. Abstr. Services Reg. No.:* 13483-18-6

*Systematic name:* 1,2-Bis(chloromethoxy)ethane

##### 1.1.2 Structural and molecular formulae and relative molecular mass



$\text{C}_4\text{H}_8\text{Cl}_2\text{O}_2$

Relative molecular mass: 159.0

##### 1.1.3 Physical properties (for details, see IARC, 1977)

(a) *Boiling-point:* 97–99°C at 1.7 kPa; 99–100°C at 2.9 kPa

(b) *Conversion factor:*  $\text{mg/m}^3 = 6.50 \times \text{ppm}$

#### 1.2 Production and use

1,2-Bis(chloromethoxy)ethane may never have been produced in commercial quantities, although its use in various situations has been investigated (IARC, 1977).

### 2. Studies of Cancer in Humans

No data were available to the Working Group.

### 3. Studies of Cancer in Experimental Animals

1,2-Bis(chloromethoxy)ethane was tested for carcinogenicity in mice by application to the skin or by subcutaneous or intraperitoneal injection; it produced malignant tumours at the sites of application (IARC, 1977).

#### **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 1,2-bis(chloromethoxy)ethane were available.

There is *limited evidence* in experimental animals for the carcinogenicity of 1,2-bis(chloromethoxy)ethane.

##### **Overall evaluation**

1,2-Bis(chloromethoxy)ethane is *not classifiable as to its carcinogenicity to humans (Group 3)*.

#### **6. References**

- IARC (1977) *IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man*, Vol. 15, *Some Fumigants, the Herbicides 2,4-D and 2,4,5-T, Chlorinated Dibenzodioxins and Miscellaneous Industrial Chemicals*, Lyon, pp. 31–35
- 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. 58