



>>Entry Name: Oxybis[chloromethane], 9Cl

Synonym(s): *sym*-Dichlorodimethyl ether. Bischloromethyl ether. Di(chloromethyl) ether. BCME

CAS Registry Number: 542-88-1

ClCH₂OCH₂Cl

Molecular Formula: C₂H₄Cl₂O

Molecular Weight: 114.958

Accurate Mass: 113.963919

Percentage Composition: C 20.90%; H 3.51%; Cl 61.68%; O 13.92%

Use/Importance: Monoalkylating agent. Used in Reformatsky reaction to produce α,α' -disubstituted dimethyl ethers

Physical Description: Liq. with pungent odour

Melting Point: Fp -41.5°

Boiling Point: Bp 104-105°

Density: d₄¹⁵ 1.328

Refractive Index: n_D²¹ 1.4350

Hazard & Toxicity: Flammable, fl. p. 42°. Human carcinogen (associated with high incidence of lung cancer). Eye and respiratory tract irritant. LD₅₀ (rat, orl) 210 mg/kg. LC₅₀ (rat, ihl) 7 ppm (7h exposure). Exp. carcinogen and neoplastic agent. Toxic by skin absorption. MEL: long-term 0.001 ppm

Rare Chemicals Library: S56333-1

References:

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