



>>Entry Name: 1,1'-Oxybis[2-chloroethane], 9Cl

Synonym(s): Di-2-chloroethyl ether. 2,2'-Dichlorodiethyl ether. Bis(2-chloroethyl) ether. Chlorex

CAS Registry Number: 111-44-4

ClCH2CH2OCH2CH2Cl

Molecular Formula: C₄H₈Cl₂O

Molecular Weight: 143.012

Accurate Mass: 141.995219

Percentage Composition: C 33.59%; H 5.64%; Cl 49.58%; O 11.19%

Use/Importance: Use in the purifn. of oils, as a soil fumigant and to assist in scouring of textiles, also as an extraction solvent, e.g. for Fe(III) from 6M HCl medium. Insecticide. Used to fumigate soil. Now superseded

Physical Description: Liq.

Melting Point: Fp -51.9°

Boiling Point: Bp 177-178°. Bp₁₂ 66°

Solubility: Misc. Et₂O, MeOH, C₆H₆

Density: d₂₀²⁰ 1.213

Hazard & Toxicity: Flammable, fl. p. 55°. Eye, skin and mucous membrane irritant. Acute exposure (1000 ppm, 30-60 min) can be fatal. LD₅₀ (rat, orl) 75 mg/kg

Aldrich: C4113-4

Fluka: 35660

Supelco: 4-8515

References:

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Sadtler Standard C-13 NMR Spectra, 20, (cmr)

Kamm, O. *et al.*, *J.A.C.S.*, 1921, **43**, 2223, (synth)

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Sandell, E.B. *et al.*, *Photometric Determination of Traces of Metals*, Wiley, New York, 1978, (use)

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