PRODUCT INFORMATION



Bis-(2-chloroisopropyl) ether

Item No. 20683

CAS Registry No.: 108-60-1

Formal Name: 2,2'-oxybis[1-chloro-propane

Synonyms: Bis(2-chloro-1-methylethyl) ether, NSC 2849

MF: $C_6H_{12}CI_2O$ FW: 171.1 **Purity:** ≥98% Supplied as: A neat oil Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Bis-(2-chloroisopropyl) ether is supplied as a neat oil. A stock solution may be made by dissolving the bis-(2-chloroisopropyl) ether in the solvent of choice. Bis-(2-chloroisopropyl) ether is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of bis-(2-chloroisopropyl) ether in these solvents is approximately 100 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of bis-(2-chloroisopropyl) ether can be prepared by directly dissolving the neat oil in aqueous buffers. The solubility of bis-(2-chloroisopropyl) ether in PBS, pH 7.2, is approximately 100 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Bis-(2-chloroisopropyl) ether is a byproduct in the synthesis of ethylene and propylene glycol that has been found in municipal drinking water in the United States and waterways in the Netherlands where it is considered a persistent organic pollutant (POP). It is mutagenic in the S. typhimurium strains TA 1535 and TA 100 but lacks mutagenic activity in mice.

Reference

1. Fishbein, L. Potential halogenated industrial carcinogenic and mutagenic chemicals. III. Alkane halides, alkanols and ethers. Sci. Total Environ. 11(3), 223-257 (1979).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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