

General

Synonyms: 1,2-dihydroxyethane, 1,2-ethanediol, EG, ethane-1,2-diol, glycol, glycol alcohol, monoethylene glycol, ethylene alcohol, MEG, Norkool, tescol, Dowtherm SR 1, Du Pont Zonyl FSO, Fridex, ucar 17, antifreeze, anti-freeze

Use: antifreeze

Molecular formula: $C_2H_6O_2$

CAS No: 107-21-1

EC No: 203-473-3

EC Index No: 603-027-00-1

Physical data

Appearance: colourless viscous liquid

Melting point: -13 C

Boiling point: 196-198 C

Specific gravity: 1.113

Vapour pressure: 0.08 mm Hg at 20 C

Vapour density: 2.1 (air = 1)

Flash point: 110 C

Explosion limits: 3.2% - 15.3%

Autoignition temperature: 400 C

Water solubility: miscible in all proportions

Stability

Stable. Substances to be avoided include strong bases, strong acids, strong oxidizing agents, perchloric acid, chromyl chloride. Protect from moisture.

Toxicology

Harmful if swallowed. Eye irritant. Typical OEL 10 - 25 ppm. Laboratory experiments have shown teratogenic effects.