



## SAFETY DATA SHEET

### ETHYLENE GLYCOL



#### General

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

Use: antifreeze

Molecular formula: C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>

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 oxidising agents, perchloric acid, chromyl chloride. Protect from moisture.

#### Toxicology

Toxic. Harmful by inhalation, ingestion and through skin absorption. Skin and respiratory irritant. Severe eye irritant. Typical OEL 10 - 25 ppm. **Reproductive hazard.**

##### Toxicity data

(The meaning of any abbreviations which appear in this section is given [here](#).)

ORL-HMN LDLO 786 mg kg<sup>-1</sup>

ORL-RAT LD50 4700 mg kg<sup>-1</sup>

IPR-MUS LD50 5614 mg kg<sup>-1</sup>

##### Risk phrases

R22.

#### Personal protection

Safety glasses, adequate ventilation.

##### Safety phrases

S26 S36 S37 S39 S45 S53.

[Return to [Physical & Theoretical Chemistry Lab. Safety home page.](#)]