

# Material Safety Data Sheet

## Ethylene glycol MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Ethylene glycol

**Catalog Codes:** SLE1072

**CAS#:** 107-21-1

**RTECS:** KW2975000

**TSCA:** TSCA 8(b) inventory: Ethylene glycol

**CI#:** Not available.

**Synonym:** 1,2-Dihydroxyethane; 1,2-Ethanediol; 1,2-Ethandiol; Ethylene dihydrate; Glycol alcohol; Monoethylene glycol; Tescol

**Chemical Name:** Ethylene Glycol

**Chemical Formula:** HOCH<sub>2</sub>CH<sub>2</sub>OH

#### Contact Information:

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**  
1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

### Section 3: Hazards Identification

#### Potential Acute Health Effects:

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of inhalation. Severe over-exposure can result in death.

#### Potential Chronic Health Effects:

**CARCINOGENIC EFFECTS:** A4 (Not classifiable for human or animal.) by ACGIH. **MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. Non-mutagenic for bacteria and/or yeast. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance may be toxic to kidneys, liver, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

### Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Ingestion.

#### Toxicity to Animals:

Acute oral toxicity (LD50): 4700 mg/kg [Rat]. Acute toxicity of the vapor (LC50): >200 mg/m<sup>3</sup> 4 hours [Rat].

#### Chronic Effects on Humans:

**CARCINOGENIC EFFECTS:** A4 (Not classifiable for human or animal.) by ACGIH. **MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. Non-mutagenic for bacteria and/or yeast. May cause damage to the following organs: kidneys, liver, central nervous system (CNS).

#### Other Toxic Effects on Humans:

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant, permeator), of inhalation.

#### Special Remarks on Toxicity to Animals:

Lowest Published Toxic Dose/Conc: TDL [Man] - Route: oral; Dose: 15gm/kg Lethal Dose/Conc 50% Kill LD50 [Rabbit] - Route: dermal; Dose: 9530 ul/kg

#### Special Remarks on Chronic Effects on Humans:

May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data. No human data has been reported at this time. May affect genetic material (mutagenic)

#### Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause skin irritation. May cause more severe response if skin is abraded. A single prolonged exposure is not likely to result in material being absorbed through skin in harmful amounts. Massive contact with damaged skin may result in absorption of potentially harmful amounts Eyes: Vapors or mist may cause temporary eye irritation (mild temporary conjunctival inflammation) and lacrimation. Corneal injury is unlikely or insignificant. Ingestion: It is rapidly absorbed from the gastrointestinal tract. Oral toxicity is expected to be moderate in humans due to Ethylene Glycol even though tests with animals show a lower degree of toxicity. Excessive exposure (swallowing large amounts) may cause gastrointestinal tract irritation with nausea, vomiting, abdominal discomfort, diarrhea. It can affect behavior/central nervous system within 0.5 to 12 hours after ingestion. A transient inebriation with excitement, stupor, headache, slurred speech, ataxia, somnolence, and euphoria, similar to ethanol intoxication, can occur within the first several hours. As the Ethylene Glycol is metabolized, metabolic acidosis and further central nervous system depression (convulsions, muscle weakness) develop. Serious intoxication may develop to coma associated with hypotonia, hyporeflexia, and less commonly seizures, and meningismus. 12 to 24 hours