

1,2-PROPANEDIOL

Material Safety Data Sheet

Mallinckrodt Chemical Inc.

P.O. Box 800

Paris, Kentucky 40362

Emergency Telephone Number
314-539-1600

Effective Date: 03-02-87

PRODUCT IDENTIFICATION:

Synonyms: Propylene glycol; 1,2-dihydroxypropane; methyl glycol

Formula CAS No.: 57-55-6

Molecular Weight: 76.09

Hazardous Ingredients: 1,2-Propanediol

Chemical Formula: C3H8O2

PRECAUTIONARY MEASURES

CAUTION! MAY CAUSE IRRITATION.

Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling.

EMERGENCY FIRST AID

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes.
SEE SECTION 5.

Physical Data

SECTION 1

Appearance: Colorless oily liquid.

Odor: Characteristic odor.

Solubility: Miscible with water.

Boiling Point: 188.2 C (371 F).

Vapor Density (Air=1): 2.6

Melting Point: -59 C (-74 F).

Vapor Pressure (mm Hg): 0.07 @ 20 C (68 F).

Density: 1.04

Evaporation Rate: No information found.

NFPA Ratings: Health: 0 Flammability: 1 Reactivity: 0

Fire and Explosion

SECTION 2

Information

Fire:

Material can support combustion. Flashpoint 99 C (210 F) (OC). Autoignition temperature: 415 C (779 F).

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Dry chemical, foam or carbon dioxide.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Reactivity Data

SECTION 3

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition. Aldehydes or lactic, pyruvic or acetic acids may also be formed.

Hazardous Polymerization:

This substance does not polymerize.

Incompatibilities:

Strong oxidizing agents.

Leak/Spill Disposal Information

SECTION 4

Remove all sources of ignition. Absorb liquid spills with a dry absorbent. Containerize unusable material for disposal in an approved waste facility. Liquids may be disposed of by mixing with more flammable solvents and atomizing into an approved incinerator.

Ensure compliance with local, state and federal regulations.

Health Hazard Information

SECTION 5

A. Exposure/Health Effects

Inhalation:

May cause mild irritation to upper respiratory tract on severe exposure to mist.

Ingestion:

Low toxicity. Ingestion of sizeable amounts (over 100ml) may cause some gastrointestinal upset and temporary central nervous system depression.

Skin Contact:

Mild irritant and defatting agent, especially on prolonged contact.

Eye Contact:

May cause transitory stinging and tearing.

Chronic Exposure:

No information found.

Aggravation of

Pre-existing Conditions: No information found.

B. FIRST AID

Inhalation:

Not expected to require first aid measures.

Ingestion:

Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Exposure:

Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Exposure:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

C. TOXICITY

(RTECS, 1986)

Oral rat LD50: 20,000 g/kg. Skin rabbit LD50: 20.8g/kg. Irritation : Eye rabbit 500 mg/24H moderate. Mutation data cited. Reproductive effects cited.

Occupational Control Measures

SECTION 6

Airborne Exposure Limits:

None established.

Ventilation System:

In general, dilution ventilation is a

satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

Personal Respirators
(NIOSH Approved)

For conditions of use where exposure to the vapor is apparent, a half mask chemical cartridge respirator may be worn. For emergencies, a self-contained breathing apparatus may be necessary.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Safety glasses. Maintain eye wash fountain and quick-drench facilities in work area.

Storage and Special Information

SECTION 7

Protect container from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture, and incompatible substances.

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Addendum to Material Safety Data Sheet

REGULATORY STATUS

**Hazard Categories for SARA
Section 311/312 Reporting**

Acute	Chronic	Fire	Pressure	Reactive
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X				

Product or Components of Product:	SARA EHS Sec. 302		SARA Sec. 313 Chemicals		CERCLA Sec. 103	RCRA Sec.
	RQ	TPQ	Name List	Chemical Category	RQ lbs	261.33
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1,2-PROPANEDIOL (57-55-6)	No	No	No	No	No	No

SARA Section 302 EHS RQ:

Reportable Quantity of Extremely Hazardous Substance, listed at 40 CFR 355.

SARA Section 302 EHS TPQ:

Threshold Planning Quantity of Extremely Hazardous substance. An asterisk (*) following a Threshold Planning Quantity signifies that if the material is a solid and has a particle size equal to or larger than 100 micrometers, the Threshold Planning Quantity = 10,000 LBS.

SARA Section 313 Chemicals:

Toxic Substances subject to annual release reporting requirements

listed at 40 CFR 372.65.

CERCLA Sec. 103:

Comprehensive Environmental Response, Compensation and Liability Act (Superfund)
Releases to air, land or water of these hazardous substances which exceed the
Reportable Quantity (RQ) must be reported to the National Response Center,
(800-424-8802); Listed at 40 CFR 302.4

RCRA:

Resource Conservation and Recovery Act. Commercial chemical product wastes
designated as acute hazards and toxic under 40 CFR 261.33

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