

Material Safety Data Sheet

Version 3.1
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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 1,3-Propanediol

Product Number : 533734
Brand : Aldrich

Company : Sigma-Aldrich Canada, Ltd
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CANADA

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Trimethylene glycol
1,3-Dihydroxypropane

Formula : $C_3H_8O_2$
Molecular Weight : 76.09 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Propane-1,3-diol			
504-63-2	207-997-3	-	-

3. HAZARDS IDENTIFICATION**WHMIS Classification**

Not WHMIS controlled.

Not WHMIS controlled.

HMIS Classification

Health Hazard: 0
Flammability: 0
Physical hazards: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

4. FIRST AID MEASURES**If inhaled**

If breathed in, move person into fresh air. If not breathing give artificial respiration

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES**Flammable properties**

Flash point > 110.00 °C (> 230.00 °F) - closed cup

Ignition temperature no data available

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE**Handling**

Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment**Respiratory protection**

Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Safety glasses

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	liquid, clear, viscous
Colour	colourless

Safety data

pH	no data available
Melting point	27 °C (81 °F)
Boiling point	214 °C (417 °F) at 1,013 hPa (760 mmHg)
Flash point	> 110.00 °C (> 230.00 °F) - closed cup
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	9.0 hPa (6.8 mmHg) at 100 °C (212 °F) < 0.1 hPa (< 0.1 mmHg) at 20 °C (68 °F)
Density	1.053 g/mL at 25 °C (77 °F)
Water solubility	no data available

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Acid chlorides, Acid anhydrides, Oxidizing agents, Chloroformates, Reducing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Genotoxicity in vivo - rat - Oral
DNA damage

Potential Health Effects

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Eyes
Ingestion

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Additional Information
RTECS: TY2010000

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

Toxicity to fish	LC50 - Carassius auratus (goldfish) - > 5,000 mg/l - 24 h
Toxicity to daphnia and other aquatic invertebrates.	EC50 - Daphnia magna (Water flea) - 7,417 mg/l - 48 h

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

DSL Status

All components of this product are on the Canadian DSL list.

WHMIS Classification

Not WHMIS controlled.

Not WHMIS controlled.

16. OTHER INFORMATION

Further information

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