

# SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.1  
Creation Date: July 15, 2019  
Revision Date: April 26, 2024

## SECTION 1: Identification

### 1.1 GHS Product identifier

Product name Tripropylene Glycol (mixture of isomers)

### 1.2 Other means of identification

Product number CCAD301537

Other names 2,5-dimethyl-3,6-dioxo-nonane-1,8-diol; 2-[2-(2-hydroxy-propoxy)-propoxy]-propan-1-ol; 2-[2-(2-hydroxypropoxy)propoxy]-1-propanol

### 1.3 Recommended use of the chemical and restrictions on use

Identified uses For laboratory and Industrial use only.

Uses advised against no data available

### 1.4 Supplier's details

Company CATO Research Chemicals Inc.

Address 3/F,Building B,No.179 BASIGO, Guangpu Rd East,Huangpu Dist,Guangzhou

Telephone +86-20-81960175

### 1.5 Emergency phone number

Emergency phone number +86-20-81960175

Service hours 'Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

Not classified.

### 2.2 GHS label elements, including precautionary statements

Pictogram(s) No symbol.

Signal word No signal word

Hazard statement(s) none

Precautionary statement(s)

Prevention none

Response none

Storage none

Disposal none

### 2.3 Other hazards which do not result in classification

no data available

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| Chemical name                            | Common names and synonyms            | CAS number | EC number | Concentration |
|------------------------------------------|--------------------------------------|------------|-----------|---------------|
| Tripropylene Glycol (mixture of isomers) | [(methylethylene)bis(oxy)]dipropanol | 24800-44-0 | 246-466-0 | 100%          |

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

If inhaled

Fresh air, rest.

Following skin contact

Remove contaminated clothes. Rinse skin with plenty of water or shower.

Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

**Following ingestion**

Rinse mouth. Give one or two glasses of water to drink.

**4.2 Most important symptoms/effects, acute and delayed**

Non-irritating; no symptoms observed by any exposure route. (USCG, 1999)

**4.3 Indication of immediate medical attention and special treatment needed, if necessary**

**Absorption, Distribution and Excretion**

Is not absorbed through skin in acutely toxic amt even from prolonged & repeated contact.

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**SECTION 5: Fire-fighting measures**

**5.1 Suitable extinguishing media**

Water, foam, carbon dioxide, dry chemical.

**5.2 Specific hazards arising from the chemical**

Special Hazards of Combustion Products: Acrid fumes of acids and aldehydes may form in fires. (USCG, 1999)

**5.3 Special protective actions for fire-fighters**

Use water spray, powder, foam, carbon dioxide.

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**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Collect leaking and spilled liquid in sealable containers as far as possible. Wash away remainder with plenty of water.

**6.2 Environmental precautions**

Collect leaking and spilled liquid in sealable containers as far as possible. Wash away remainder with plenty of water.

**6.3 Methods and materials for containment and cleaning up**

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

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**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

NO open flames. Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

**7.2 Conditions for safe storage, including any incompatibilities**

Well closed.

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**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**Occupational Exposure limit values**

no data available

**Biological limit values**

no data available

**8.2 Appropriate engineering controls**

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

**8.3 Individual protection measures, such as personal protective equipment (PPE)**

**Eye/face protection**

Wear safety spectacles.

**Skin protection**

Protective gloves.

**Respiratory protection**

Use ventilation.

**Thermal hazards**

no data available

## SECTION 9: Physical and chemical properties and safety characteristics

|                                                          |                                                                                                                                             |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Physical state                                           | Liquid. Viscous.                                                                                                                            |
| Colour                                                   | Colourless.                                                                                                                                 |
| Odour                                                    | ODORLESS                                                                                                                                    |
| Melting point/freezing point                             | < -20 °C. Atm. press.:Ca. 101.3 kPa.                                                                                                        |
| Boiling point or initial boiling point and boiling range | 270 °C. Atm. press.:100.47 kPa.                                                                                                             |
| Flammability                                             | Combustible.                                                                                                                                |
| Lower and upper explosion limit/flammability limit       | no data available                                                                                                                           |
| Flash point                                              | 145 °C. Atm. press.:100.11 kPa.                                                                                                             |
| Auto-ignition temperature                                | 232 °C. Atm. press.:> 101.08 - < 102.33 kPa.                                                                                                |
| Decomposition temperature                                | no data available                                                                                                                           |
| pH                                                       | no data available                                                                                                                           |
| Kinematic viscosity                                      | kinematic viscosity (in mm <sup>2</sup> /s) = 77.3. Temperature:20°C.;kinematic viscosity (in mm <sup>2</sup> /s) = 23.4. Temperature:40°C. |
| Solubility                                               | SOL IN WATER, METHANOL, ETHER                                                                                                               |
| Partition coefficient n-octanol/water                    | log Pow = -0.379. Temperature:21.5 °C.;Pow = 0.418. Temperature:21.5 °C.                                                                    |
| Vapour pressure                                          | 0.26 Pa. Temperature:25 °C.                                                                                                                 |
| Density and/or relative density                          | 1.02. Temperature:20 °C.                                                                                                                    |
| Relative vapour density                                  | 6.63 (vs air)                                                                                                                               |
| Particle characteristics                                 | no data available                                                                                                                           |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Attacks some plastics.

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

COMBUSTIBLE. TRIPROPYLENE GLYCOL is a ether-alcohol derivative. The ether being relatively unreactive. Flammable and/or toxic gases are generated by the combination of alcohols with alkali metals, nitrides, and strong reducing agents. They react with oxoacids and carboxylic acids to form esters plus water. Oxidizing agents convert alcohols to aldehydes or ketones. Alcohols exhibit both weak acid and weak base behavior. They may initiate the polymerization of isocyanates and epoxides. May attack some forms of plastics (USCG, 1999).

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

no data available

## SECTION 11: Toxicological information

### Acute toxicity

- Oral: LD50 - rat (male/female) - > 2 000 mg/kg bw.
- Inhalation: LC50 - rat - > 0.083 mg/L air.
- Dermal: LD50 - rabbit (male) - > 16 320 mg/kg bw.

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**STOT-single exposure**

no data available

**STOT-repeated exposure**

no data available

**Aspiration hazard**

A harmful contamination of the air will not or will only very slowly be reached on evaporation of this substance at 20°C.

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## SECTION 12: Ecological information

### 12.1 Toxicity

- Toxicity to fish: LC50 - *Oryzias latipes* - > 1 000 mg/L - 96 h.
- Toxicity to daphnia and other aquatic invertebrates: EC50 - *Daphnia magna* - > 1 000 mg/L - 24 h.
- Toxicity to algae: EC50 - *Pseudokirchneriella subcapitata* (previous names: *Raphidocelis subcapitata*, *Selenastrum capricornutum*) - > 1 000 mg/L - 72 h.
- Toxicity to microorganisms: EC50 - activated sludge of a predominantly domestic sewage - > 1 000 mg/L - 3 h. Remarks: Respiration rate.

### 12.2 Persistence and degradability

By analogy to dipropylene glycol, a structurally similar compound, tripropylene glycol is expected to be resistant to biodegradation(SRC). Polypropylene glycol-utilizing bacteria were isolated by enrichment culture; one strain from this culture was able to grow using various polypropylene glycols (diol and triol types) as a carbon source(1). Dipropylene glycol in a five day BOD test, reached 0(2)-5%(3) of the theoretical oxygen demand. Over a four week period with dipropylene glycol added at 30 mg/L, only 0-3% by BOD was degraded(4). Biodegradation of dipropylene glycol proceeds through the oxidation of terminal alcohol groups leading to the cleavage of the ether linkage(1).

### 12.3 Bioaccumulative potential

An estimated BCF value of 0 was calculated for tripropylene glycol(SRC), using an estimated log Kow of -0.50(1,SRC) and a recommended regression-derived equation(2). According to a recommended classification scheme(3), this BCF value indicates that bioconcentration in aquatic organisms will not be an important fate process(SRC).

### 12.4 Mobility in soil

The Koc of tripropylene glycol is estimated as approximately 13(SRC), using an estimated log Kow of -0.50(1,SRC) and a regression-derived equation(2,SRC). According to a recommended classification scheme(3), this estimated Koc value suggests that tripropylene glycol has very high mobility in soil(SRC).

### 12.5 Other adverse effects

no data available

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## SECTION 13: Disposal considerations

### 13.1 Disposal methods

**Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

**Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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## SECTION 14: Transport information

### 14.1 UN Number

ADR/RID: UN3077 (For reference only, please check.)      IMDG: UN3077 (For reference only, please check.)      IATA: UN3077 (For reference only, please check.)

### 14.2 UN Proper Shipping Name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (For reference only, please check.)      IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (For reference only, please check.)      IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (For reference only, please check.)

### 14.3 Transport hazard class(es)

ADR/RID: 9 (For reference only, please check.) IMDG: 9 (For reference only, please check.) IATA: 9 (For reference only, please check.)

#### 14.4 Packing group, if applicable

ADR/RID: III (For reference only, please check.)

IMDG: III (For reference only, please check.)

IATA: III (For reference only, please check.)

#### 14.5 Environmental hazards

ADR/RID: Yes

IMDG: Yes

IATA: Yes

#### 14.6 Special precautions for user

no data available

#### 14.7 Transport in bulk according to IMO instruments

no data available

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations specific for the product in question

| Chemical name                                                            | Common names and synonyms            | CAS number | EC number   |
|--------------------------------------------------------------------------|--------------------------------------|------------|-------------|
| [(methylethylene)bis(oxy)]dipropanol                                     | [(methylethylene)bis(oxy)]dipropanol | 24800-44-0 | 246-466-0   |
| European Inventory of Existing Commercial Chemical Substances (EINECS)   |                                      |            | Listed.     |
| EC Inventory                                                             |                                      |            | Listed.     |
| United States Toxic Substances Control Act (TSCA) Inventory              |                                      |            | Listed.     |
| China Catalog of Hazardous chemicals 2015                                |                                      |            | Not Listed. |
| New Zealand Inventory of Chemicals (NZIoC)                               |                                      |            | Listed.     |
| Philippines Inventory of Chemicals and Chemical Substances (PICCS)       |                                      |            | Listed.     |
| Vietnam National Chemical Inventory                                      |                                      |            | Listed.     |
| Chinese Chemical Inventory of Existing Chemical Substances (China IECSC) |                                      |            | Listed.     |
| Korea Existing Chemicals List (KECL)                                     |                                      |            | Listed.     |

### SECTION 16: Other information

#### Information on revision

Creation Date July 15, 2019  
Revision Date April 26, 2024

#### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

#### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

#### Other Information

Health effects of exposure to the substance have been investigated, but none has been found.

Any questions regarding this SDS, Please send your inquiry to [info@cato-chem.com](mailto:info@cato-chem.com)

*Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate*

*safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.*