

Printing date 2024-06-18 Revision: 2024-06-18

1 Identification of the substance/mixture and of the company/undertaking

- · Product identifier
- · Trade name: Tripropylene Glycol Monomethyl Ether
- · Synonyms:

TPGME; Methyltripropylene glycol; TPM; [2-(2-Methoxymethylethoxy)methylethoxy]-propanol; [2-(2-Methoxypropoxy)propoxy)propoxy]propanol; [1-[2-Methoxy-1-propoxy)-1-propoxy]-2-propanol;

• **CAS Number:** 25498-49-1

- Relevant identified uses of the substance or mixture and uses advised against:
- · Identified/Recommended uses: Solvent
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Chang Chun Petrochemical Co. Ltd. 7th Fl., No. 301, SongJiang Rd. Taipei City, 104070, TAIWAN

Tel: +886-2-2500-1800 Fax: +886-2-2501-8317

www.ccpgp.com

- · Further information obtainable from: SDS-info@ccp.com.tw
- · Emergency telephone number:

3E Global Incident Response Hotline 24h (Access Code 336088):

Americas: +1 760 476 3961 Asia-Pacific: +1 760 476 3960 Europe: +1 760 476 3962

Middle East/Africa: +1 760 476 3959 Non-Region Specific: +1 760 476 3971

2 Hazards identification

· Classification of the substance or mixture:

Acute Tox. 5 H303 May be harmful if swallowed.

- · Label elements:
- · Hazard pictograms: None (Not Required) Not Regulated/Not Hazardous
- · Signal word: Warning
- Hazard statements:

May be harmful if swallowed.

· Precautionary statements:

Call a POISON CENTER/doctor if you feel unwell.

· Other hazard: None known.

3 Composition/information on ingredients

- · Chemical characterisation: Substances
- · CAS No. Description

25498-49-1 Tripropyleneglycol methylether ≥97.5%

4 First aid measures

- Description of first aid measures
- · General information: First aider needs to protect himself.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Generally the product does not irritate the skin. Rinse cautiously with water for several minutes. If skin irritation continues, consult a doctor.



Printing date 2024-06-18 Revision: 2024-06-18

Trade name: Tripropylene Glycol Monomethyl Ether

(Contd. of page 1)

· After eye contact: Rinse opened eye for several minutes under running water.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

Most important symptoms and effects, both acute and delayed:

No known chronic or acute health risks.

· Indication of any immediate medical attention and special treatment needed

Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5 Firefighting measures

- Extinguishing media
- · Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

- For safety reasons unsuitable extinguishing agents: No further relevant information available.
- · Special hazards arising from the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Fume

Carbon dioxide (CO2)

Carbon monoxide (CO)

- Advice for firefighters
- · Protective equipment:

Wear protective fire fighting clothing (including fire fighting helmet, coat, trousers, boots, and gloves).

If necessary, wear fully protective suit and air respirator.

Wear self-contained respiratory protective device.

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves).

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

If possible, stop flow of product.

Ensure adequate ventilation

- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up:

Collect, bind, and pump off spills.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Allow to solidify. Pick up mechanically.

For large liquid spills (>1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Use personal protective equipment as required.

Wear protective gloves/protective clothing/eye protection/face protection.

(Contd. on page 3)



Printing date 2024-06-18 Revision: 2024-06-18

Trade name: Tripropylene Glycol Monomethyl Ether

(Contd. of page 2)

Ensure good ventilation/exhaustion at the workplace.

- · Information about fire and explosion protection: No special measures required.
- · Storage:
- · Conditions for safe storage, including any incompatibilities

Store in cool, dry place in tightly closed receptacles.

Further information about storage conditions: None.

8 Exposure controls/personal protection

· Control parameters

· Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Ingredients with biological limit values:

The product does not contain any relevant quantities of materials with biological limited values that have to be monitored.

· Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Do not eat, drink, smoke or sniff while working.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

Ensure that washing facilities are available at the work place.

· Respiratory protection: Not necessary if room is well-ventilated.

· Protection of hands:



Protective gloves

The selected protective gloves have to satisfy the specifications of standard EN 374 or its equivalent. Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility etc) is noticed.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Plastic gloves

Rubber gloves

Nitrile rubber, NBR

Butyl rubber, BR

Ethyl vinyl alcohol laminate (EVAL)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Safety glasses with side shields conforming to EN166, ANSI 87.1-2010, or equivalent.



Printing date 2024-06-18 Revision: 2024-06-18

Trade name: Tripropylene Glycol Monomethyl Ether

(Contd. of page 3)

· Body protection:

Protective work clothing

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid
Colour: Colourless
Odour: Ether-like
Odour threshold: Not determined.
pH-value: Not determined.

• **Melting point/freezing point:** -78 °C (Literature; closed cup)

· Initial boiling point and boiling range: 243 °C (Literature) · Flash point: 116 °C (Literature)

• Flammability (solid, gas): Not applicable - This product is a liquid.

Auto-ignition temperature:
 Decomposition temperature:
 Ignition temperature:
 Not determined.

• Explosive properties: Product does not present an explosion hazard.

· Explosion limits:

Lower:
Upper:
7 Vol %
7 Vol %
7 Vol %
0.03 hPa

Density:
Relative density
Vapour density
Vapour density
Evaporation rate

1.1 Vol %
7 Vol %
0.088 g/cm³
Not determined.
Not determined.

· Solubility in / Miscibility with

water: Fully miscible.

• Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic at 20 °C: 6.48 mPas **Kinematic:** Not determined.

Solids content: 0.0 %

10 Stability and reactivity

- Reactivity: When properly handled and stored, no dangerous reaction is known.
- · Chemical stability: This product is stable under prescribed use and storage.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid:

Strong heating.

Product can oxidize at elevated temperature.

Do not distill to dryness.



Printing date 2024-06-18 Revision: 2024-06-18

Trade name: Tripropylene Glycol Monomethyl Ether

(Contd. of page 4)

· Incompatible materials:

Strong oxidizing agents

Strong acids

Strong bases

Hazardous decomposition products:

Carbon monoxide (CO) and carbon dioxide (CO₂)

Aldehyde

Acids

Decomposition products depend upon temperature, air supply and the presence of other materials.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity May be harmful if swallowed.

| LD/LC50 values relevant for classification: | | |
|---|--------|----------------------------------|
| 25498-49- | 1 Trip | ropylene glycol monomethyl ether |
| Oral | LD50 | 3,500 mg/kg (rat) |
| Dermal | LD50 | 15,440 mg/kg (rab) |
| Inhalative | LC0 | >330 ppm (rat) (8hr) |

· Skin corrosion/irritation:

Not classified based on available data.

Rabbit: not irritating (OECD Test Guideline 404)

· Serious eye damage/eye irritation:

Not classified based on available data.

Rabbit: not irritating (OECD Test Guideline N/A; EPA OPP81-4)

· Respiratory or skin sensitization:

Not classified based on available data.

Mice (Local Lymph Node Assay): Not sensitizing to the skin (OECD Test Guideline 429)

Germ Cell Mutagenicity:

Not classified based on available data.

In-vitro genotoxicity (mammalian cells): negative (OECD 473)

Information based on a structurally similar material.

· Carcinogenicity:

Not classified based on available data.

No Adverse Effect Concentration (NOAEC): 25312 mg/m³

Information based on a structurally similar material.

· Reproductive Toxicity:

Not classified based on available data.

Did not cause birth defects in laboratory animals.

Does not impair fertility. Not a developmental toxicant.

No Adverse Effect Concentration (NOAEC): 3000 mg/m³

- Specific Target Organ Toxicity Single Exposure (STOT SE): Not classified based on available data.
- Specific Target Organ Toxicity Repeated Exposure (STOT RE):

Not classified based on available data.

- · Aspiration Hazard: Not classified based on available data.
- · Primary irritant effect:
- Skin corrosion/irritation No irritating effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.

- GHS E-



Printing date 2024-06-18 Revision: 2024-06-18

Trade name: Tripropylene Glycol Monomethyl Ether

(Contd. of page 5)

12 Ecological information

- · Toxicity
- · Aquatic toxicity:

Not classified based on available data.

Material is not classified as dangerous to aquatic organisms (LC50 / EC50 / IC50 / LL50 / EL50 >100 mg/L in most sensitive species).

| | 25498-49-1 Tripropylene glycol monomethyl ether | | |
|---|---|--------------------------------------|--|
| Ī | EC50 | 21,010 mg/kg (microorganisms) (QSAR) | |
| İ | EC50/48h | >10,000 mg/l (daphnia) (OECD 202) | |
| | EC50/96h | 11,619 mg/l (fish) (OECD 203) | |

· Persistence and degradability

Easily biodegradable

Degradation: 66% (28, OECD 301F)

· Bioaccumulative potential

Bioaccumulation is not expected.

Bioconcentration Factor (BCF) = 1.162 (EPIWIN QSAR)

· Mobility in soil

Henry's Law Constant (H): 0.272 Pa m³/mol @ 20°C Pa m3/mol at 20 °C

Level III Fugacity Modelling:

Air: 0.25 % Water: 48.5 % Soil: 51.1 % Sediment: 0.08 %

· Additional ecological information:

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Recover or recycle if possible.

Contact waste processors for recycling information.

After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

Any disposal method should also comply with national, regional, provincial, and local laws.

- · Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

• Dangerous Goods classification Status: Not classified as a dangerous good with respect to transport regulations (IMDG, IATA, ADN, ADR, US DOT).

(Contd. on page 7)



Printing date 2024-06-18 Revision: 2024-06-18

Trade name: Tripropylene Glycol Monomethyl Ether

(Contd. of page 6)

· UN-Number

· ADR, IMDG, IATA None (Not a Dangerous Good)

· UN proper shipping name

· ADR, IMDG, IATA None (Not a Dangerous Good)

· Transport hazard class(es)

· ADR, ADN, IMDG, IATA

· Class None (Not a Dangerous Good)

· Packing group

· ADR, IMDG, IATA None (Not a Dangerous Good)

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Not applicable.

· UN "Model Regulation": None (Not a Dangerous Good)

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

Status of global inventories:

All component(s) within this product is listed or exempted from the following country's chemical inventory:

USA – TSCA

Australia - AICS

Canada – DSL China – IECSC

EU - EINECS/NLP

Japan - ENCS

Korea – KECI

New Zealand - NZIoC

Philippines - PICCS

Taiwan - TCSI

Mexico - INSQ

Thailand - TECI

Vietnam – NCI

16 Other information

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 5: Acute toxicity - Category 5

· Sources

Most toxicological and eco-toxicological data are obtained from European Chemical Agency (ECHA)'s public dissemination website.

https://echa.europa.eu/registration-dossier/-/registered-dossier/13199

General Disclaimers:

CCP Group recommends that all the users/customers/recipients to study this Safety Data Sheet (SDS) carefully and understand all the data or any potential hazards associated with this product. Please consult with appropriate expert if necessary. The information herein is provided in good faith and is believed to be accurate on the date of issue. No warranty, expressed or implied, is given. It is the customer's/user's responsibility to ensure that they are complying with local, regional, state, provincial, and/or national laws in using this product, as regulatory requirement may differ at each level. It is also the customer's/user's

(Contd. on page 8)



Printing date 2024-06-18 Revision: 2024-06-18

Trade name: Tripropylene Glycol Monomethyl Ether

(Contd. of page 7)

responsibility to determine the necessary condition required for using this product safely, as actual operating or usage conditions are beyond CCP Group's control. CCP Group will not be responsible for any SDS obtained from elsewhere other than from CCP Group. If you are unsure whether the SDS you have is current or have obtained the SDS from another source; please contact us to obtain the latest version.

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