



SAFETY DATA SHEET

According to JIS Z 7253:2019 Revision date 26-Feb-2024 Revision Number 2.03

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Dipropylene Glycol Monomethyl Ether(mixture of isomers)
Product Code	130-08312,134-08315
Supplier	FUJIFILM Wako Pure Chemical Corporation
	1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan
	Phone: +81-6-6203-3741
	Fax: +81-6-6203-2029
Emergency telephone number	+81-6-6203-3741 / +81-3-3270-8571
Recommended uses	For research use only
Restrictions on use	Seek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification <u>Classification of the substance or mixture</u> Flammable liquids Serious eye damage/eye irritation Specific target organ toxicity (single exposure) <u>Category 3</u> Respiratory irritation, Narcotic effects

Pictograms



Signal word

Warning

Hazard statements

- H227 Combustible liquid
- H320 Causes eye irritation
- H335 May cause respiratory irritation
- H336 May cause drowsiness or dizziness

Precautionary statements-(Prevention)

- Wash face, hands and any exposed skin thoroughly after handling
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- · Wear protective gloves/protective clothing/eye protection/face protection
- Keep cool

Precautionary statements-(Response)

• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

- If eye irritation persists: Get medical advice/attention
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell

Category 4 Category 2B Category 3 • In case of fire: Use suitable extinguishing media for extinction

Precautionary statements-(Storage)

- Store in a well-ventilated place. Keep container tightly closed
- Store locked up

Precautionary statements-(Disposal)

• Dispose of contents/container to an approved waste disposal plant

Others Other hazards

Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula

СНЗОСЗН6ОСЗН6ОН

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Dipropylene Glycol	95.0	148.20	(2)-426,(7)-97	*	34590-94-8
Monomethyl Ether					

Note on ISHL No.:

* in the table means announced chemical substances.

Substances Remarks:

This product is composed of isomer mixture.

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Highly flammable. Avoid contact with high temperature objects, spark, and strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Storage

Safe storage conditions

Storage conditions

Safe packaging material Incompatible substances

Store away from sunlight in well-ventilated place at room temperature (preferably cool). Keep container tightly closed. Glass Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Dipropylene Glycol Monomethyl Ether 34590-94-8	N/A	N/A	TWA: 50 ppm

Personal protective equipment

 Respiratory protection
 Protective mask

 Hand protection
 chemical protective gloves (JIS T 8116)

 Eye protection
 protective eyeglasses or chemical safety goggles (JIS T 8147)

 Skin and body protection
 Long-sleeved work clothes

 General hygiene considerations
 Handle in accordance with good industrial hygiene and safety practice.

 If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protect

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form Color Turbidity Appearance Odor Melting point/freezing point Boiling point, initial boiling point and boiling range Flammability Evaporation rate: Flammability (solid, gas): Upper/lower flammability or explosive limits Upper: Lower: Flash point Auto-ignition temperature: **Decomposition temperature:** рΗ Viscosity (coefficient of viscosity) Dynamic viscosity Solubilities n-Octanol/water partition coefficient:(log Pow) Vapour pressure Specific Gravity / Relative density Vapour density **Particle characteristics**

Colorless - nearly colorless clear liquid no data available -83 °C 190 °C Combustible liquid no data available no data available no data available no data available 74 °C no data available water and Ethanol : Very soluble. no data available no data available 0.950 - 0.960 g/mL no data available no data available

Section 10: STABILITY AND REACTIVITY

Stability

 Reactivity
 no data available

 Chemical stability
 Stable under recommended storage conditions.

 Hazardous reactions
 Stable under recommended storage conditions.

 None under normal processing
 Conditions to avoid

 Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark

 Incompatible materials
 Strong oxidizing agents

 Hazardous decomposition products
 Carbon monooxide (CO), Carbon dioxide (CO2)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity **Chemical Name** Oral LD50 **Dermal LD50** Inhalation LC50 Dipropylene Glycol >5000 mg/kg (Rat) >5000 mg/kg (Rabbit) >4.1 mg/L (Rat) 4 h Monomethyl Ether Acute toxicity -inhalation gas-**Chemical Name** Acute toxicity -oral- source Acute toxicity -dermal- source source information information information Dipropylene Glycol Monomethyl Based on the NITE GHS Based on the NITE GHS Based on the NITE GHS classification results. classification results. classification results. Ether

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	vapor- source information	source information	source information	
Dipropylene Glycol Monomethyl	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS	
Ether	classification results.	classification results.	classification results.	
kin irritation/corrosion				
Chemical	Name	Skin corrosion/irri	tation source information	
Dipropylene Glycol N	Ionomethyl Ether	Based on the NITE GHS clas	Based on the NITE GHS classification results.	
Serious eye damage/ irritation				
Chemical	Name	Serious eye damage/	irritation source information	
Dipropylene Glycol N	Ionomethyl Ether	Based on the NITE GHS clas	ssification results.	
Respiratory or skin sensitization				
Chemical	Name		nsitization source information	
Dipropylene Glycol N	Ionomethyl Ether	Based on the NITE GHS classification results.		
Reproductive cell mutagenicity				
Chemical Name			ncity source information	
Dipropylene Glycol Monomethyl Ether		Based on the NITE GHS clas	ssification results.	
Carcinogenicity				
Chemical Name			ty source information	
Dipropylene Glycol Monomethyl Ether		Based on the NITE GHS clas	ssification results.	
Reproductive toxicity				
Chemical Name		Reproductive tox	Reproductive toxicity source information	
Dipropylene Glycol N	Ionomethyl Ether	Based on the NITE GHS classification results.		
STOT-single exposure		·		
Chemical	Name	STOT -single exposure- source information		
Dipropylene Glycol Monomethyl Ether		Based on the NITE GHS classification results.		
STOT-repeated exposure				
Chemical Name		STOT -repeated exp	STOT -repeated exposure- source information	
Dipropylene Glycol Monomethyl Ether		Based on the NITE GHS classification results.		
Aspiration hazard				
Chemical	Name		ard source information	
Dipropylene Glycol N	Ionomethyl Ether	Based on the NITE GHS clas	Based on the NITE GHS classification results.	

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Dipropylene Glycol	N/A	LC50:Pimephales promelas	LC50:Daphnia magna
Monomethyl Ether		10000 mg/L 96 h	1919 mg/L 48 h

Other data

Chemical Name	Short-term (acute) hazardous to the	Long-term (chronic) hazardous to the
a	aquatic environment source information	aquatic environment source information
Dipropylene Glycol Monomethyl Ether	Based on the NITE GHS classification	Based on the NITE GHS classification
r	results.	results.

Persistence and degradability Bioaccumulative potential Mobility in soil Hazard to the ozone layer No information available No information available No information available No information available

Section 13: DISPOSAL CONSIDERATIONS

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Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations. Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID UN number Proper shipping name: UN classfication Subsidiary hazard class Packing group Marine pollutant	Not regulated - Not applicable
IMDG	Not regulated
UN number Proper shipping name:	-
UN classfication	
Subsidiary hazard class Packing group	
Marine pollutant (Sea)	Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available
IATA	Not regulated
UN number	-
Proper shipping name: UN classfication	
Subsidiary hazard class Packing group Environmentally Hazardous Substance	Not applicable

Section 15: REGULATORY INFORMATION

<u>Japanese regulations</u> Fire Service Act Poisonous and Deleterious Substances Control Law	Category IV, Class III petroleums, dangerous grade 3 water-soluble Not applicable
Industrial Safety and Health Ac	t Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57)
	Notifiable Substances (Law Art.57-2)
Industrial Safety and Health Act (2024~)	[2024.4.1~] Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)
Regulations for the carriage and storage of dangerous goods in ship	Not applicable
Civil Aeronautics Law	Not applicable
Marine Pollution Prevention Law	Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Z
Pollutant Release and Transfer Register Law (2023.4.1-)	Not applicable
Export Trade Control Order	Not applicable

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law (2023.4.1-)
			(2020.4.1)
Dipropylene Glycol Monomethyl Ether	-	Applicable	-

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law (2023.4.1-)
34590-94-8 (95.0)			

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.	NITE: National Institute of Technology and Evaluation (JAPAN) http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd. Chemical Dictionary, Kyouritsu Publishing Co., Ltd. etc

Record of SDS revisions Disclaimer

The following contents were revised. Regulatory information.

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet