

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Wear protective gloves/protective clothing/eye protection/face protection

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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown Acute Toxicity

12.73% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
DI Water	7732-18-5	<30
Aliphatic Glycol Ethers	Proprietary	>60

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse. Call a physician.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration.
Ingestion	If large amount is swallowed, give lukewarm water (pint, 1/2 liter). Do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects

Symptoms	Exposed individuals may experience eye tearing, redness and discomfort. Prolonged or repeated exposure by inhalation may cause headaches and palpitations. May cause nausea, vomiting, stomach ache, and diarrhea. Dizziness.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical. Water spray (fog).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

This material may produce a floating fire hazard in extreme fire conditions.

Hazardous Combustion Products Carbon oxides.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Environmental Precautions Do not release into sewers or waterways.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Contain and collect with an inert absorbent and place into an appropriate container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Wash thoroughly after handling. Use personal protection recommended in Section 8. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use spark-proof tools and explosion-proof equipment. Ground/bond container and receiving equipment. Take precautionary measures against static discharges. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Use only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

Incompatible Materials Strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aliphatic Glycol Ether	STEL: 150 ppm TWA: 100 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m ³	TWA: 100 ppm TWA: 360 mg/m ³ STEL: 150 ppm STEL: 540 mg/m ³

Appropriate engineering controls

Engineering Controls Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses.

Skin and Body Protection Chemical resistant protective gloves. Vinyl not recommended.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

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

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical State	Liquid	Odor	Mild
Appearance	Clear liquid	Odor Threshold	Not determined
Color	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not established	
Boiling Point/Boiling Range	98 °C / 208 °F	
Flash Point	56 °C / 132 °F	Tag Closed Cup
Evaporation Rate	Not established	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	16-18 mm Hg	
Vapor Density	3.0-4.0	(Air=1)
Specific Gravity	0.97	(1=Water)
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Will not occur	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Water-like	
Dynamic Viscosity	Water-like	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Strong oxidizers.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Eye Contact	Causes serious eye irritation.
Skin Contact	Avoid contact with skin.
Inhalation	Avoid breathing vapors or mists.
Ingestion	Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
DI Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Aliphatic Glycol Ethers	= 2504 mg/kg (Rat)	= 3550 mg/kg (Rabbit)	-
Aliphatic Glycol Ether	= 13300 mg/kg (Rat)	> 20 mL/kg (Rabbit)	-
Aliphatic Glycol Ethers	= 1620 µL/kg (Rat)	= 5660 µL/kg (Rabbit)	-
Aliphatic Glycol Ether	= 20000 mg/kg (Rat)	= 20800 mg/kg (Rabbit)	-
Aliphatic Glycol Ether	= 5200 mg/kg (Rat)	= 13000 mg/kg (Rabbit)	= 54.6 mg/L (Rat) 4 h > 24 mg/L (Rat) 1 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity 12.73% of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Aliphatic Glycol Ether		5000: 24 h Carassius auratus mg/L LC50 static		

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Aliphatic Glycol Ether	19000: 96 h Pseudokirchneriella subcapitata mg/L EC50	51600: 96 h Oncorhynchus mykiss mg/L LC50 static 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50		10000: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50 Static
Aliphatic Glycol Ether		20.8: 96 h Pimephales promelas g/L LC50 static 4600 - 10000: 96 h Leuciscus idus mg/L LC50 static		23300: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Aliphatic Glycol Ether	-0.437

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods**Disposal of Wastes**

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

Contaminated Packaging

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

14. TRANSPORT INFORMATION

Note

The shipping description is specific to the container and mode of shipment.
NOTE: packages with inner packagings not over 5 liter/5 kg may be reclassified as a Limited Quantity. Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No	UN1993
Proper Shipping Name	Flammable liquid, n.o.s. (PNP glycol ether, 1-methoxy-2-propanol)
Hazard Class	3
Packing Group	III

IATA

UN/ID No	UN1993
Proper Shipping Name	Flammable liquid, n.o.s. (PNP glycol ether, 1-methoxy-2-propanol)
Hazard Class	3
Packing Group	III

IMDG

UN/ID No	UN1993
Proper Shipping Name	Flammable liquid, n.o.s. (PNP glycol ether, 1-methoxy-2-propanol)
Hazard Class	3
Packing Group	III

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
DI Water	Present	X		Present			X	Present	X	X
Aliphatic Glycol Ethers	Present	X		Present		Present	X	Present	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Not determined

US State Regulations**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
DI Water 7732-18-5			X
Aliphatic Glycol Ether			X
Aliphatic Glycol Ether	X		X
Aliphatic Glycol Ether	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	1	2	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	1	2	0	B

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Disclaimer

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, use, processing, storage, transportation, disposal and release 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.

End of Safety Data Sheet