



# ANTIFREEZE LIQUID

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : ANTIFREEZE LIQUID  
Product code : UNIM1026  
Type of product : Antifreeze

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Main use category : Industrial use  
Industrial/Professional use spec : Industrial  
Function or use category : Anti-freezing agents

Title	Use descriptors
	SU3, PC35, PROC5, ERC2

Full text of use descriptors: see section 16

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

UNIMARINE SERVICES INC. 60  
MARKET SQUARE BELIZE CITY  
T +35725331054  
[info@unimarine-services.com](mailto:info@unimarine-services.com)

#### 1.4. Emergency telephone number

Emergency number : +35725331054

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302  
Specific target organ toxicity — Repeated exposure, Category 2 H373

Full text of H statements : see section 16

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) : Warning  
Hazardous ingredients : Ethanediol  
Hazard statements (CLP) : H302 - Harmful if swallowed  
H373 - May cause damage to organs through prolonged or repeated exposure  
Precautionary statements (CLP) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray  
P264 - Wash ... thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor/... if you feel unwell  
P314 - Get medical advice/attention if you feel unwell  
P330 - Rinse mouth  
Child-resistant fastening : No  
Tactile warning : No

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### 2.3. Other hazards

Adverse physicochemical, human health and environmental effects : May cause damage to organs through prolonged or repeated exposure. Harmful if swallowed.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethenediol	(CAS No) 107-21-1 (EC no) 203-473-3 (EC index no) 603-027-00-1 (REACH-no) 01-2119456816-28	99 - 100	Xn; R22	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

Full text of R- and H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : If medical advice is needed, have product container or label at hand.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause drowsiness or dizziness. Cough.  
Symptoms/injuries after skin contact : Red skin.  
Symptoms/injuries after eye contact : May cause slight irritation.  
Symptoms/injuries after ingestion : Nausea. Shortness of breath.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.  
Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.  
Reactivity in case of fire : release of harmful gases/vapours (carbon monoxide - carbon dioxide).  
Hazardous decomposition products in case of fire : fume. Carbon monoxide.

### 5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.  
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe dust, fume, gas, mist, spray, vapours.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.  
Incompatible products : Oxidizing agent. Acids.  
Incompatible materials : aluminium. Natural rubber.  
Storage temperature : 0 - 40 °C

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Ethenediol (107-21-1)		
EU	Local name	Ethylene glycol
EU	IOELV TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
EU	IOELV STEL (ppm)	40 ppm
EU	Notes	Skin
Belgium	Local name	Ethylèneglycol (en aérosol)
Belgium	Limit value (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Belgium	Limit value (ppm)	20 ppm
Belgium	Short time value (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Belgium	Short time value (ppm)	40 ppm
Belgium	Remark (BE)	D, M
Germany	Local name	Ethandiol
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	26 mg/m <sup>3</sup>
Germany	TRGS 900 Occupational exposure limit value (ppm)	10 ppm
Germany	Remark (TRGS 900)	DFG,EU,H,Y
Italy	Local name	Etilen glicol
Italy	OEL TWA (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Italy	OEL TWA (ppm)	20 ppm
Italy	OEL STEL (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Italy	OEL STEL (ppm)	40 ppm
Spain	Local name	Etilenglicol
Spain	VLA-ED (mg/m <sup>3</sup> )	52 mg/m <sup>3</sup>
Spain	VLA-ED (ppm)	20 ppm
Spain	VLA-EC (mg/m <sup>3</sup> )	104 mg/m <sup>3</sup>
Spain	VLA-EC (ppm)	40 ppm

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Ethanediol (107-21-1)		
Spain	Notes	Vía dérmica: (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante. Para más información véase el Apartado 5 de este documento.), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país.)

### 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemical resistant PVC gloves (to European standard EN 374 or equivalent)	Butyl rubber		0.7		

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Gas mask	Filter AX (brown)		

Environmental exposure controls : Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Colorless, viscous liquid.
Colour	: Colourless.
Odour	: odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -13 °C Not applicable
Freezing point	: No data available
Boiling point	: 197,4 °C
Flash point	: 111 °C
Auto-ignition temperature	: 398 °C
Decomposition temperature	: 500 °C
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 0,012 kPa 25 °C
Relative vapour density at 20 °C	: 2,1
Relative density	: 1
Solubility	: Soluble in water.
Log Pow	: -1,36
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 16,1 mPa.s
Explosive properties	: No data available

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Oxidising properties : No data available  
Explosive limits : No data available

### 9.2. Other information

VOC content : > 99 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts violently with strong acids. Oxidizer.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Reacts vigorously with strong oxidizers and acids.

### 10.4. Conditions to avoid

Direct sunlight. Heat. Moisture.

### 10.5. Incompatible materials

Acids. aluminium. Oxidizing agent. Natural rubber.

### 10.6. Hazardous decomposition products

Carbon monoxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

ANTIFREEZE LIQUID	
LD50 oral rat	7712 mg/kg
LD50 dermal rabbit	9530 mg/kg
LC50 inhalation rat (mg/l)	> 2,5 6 u

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

NTI FREEZE LIQUID	
LC50 fish 1	72860 mg/l Pimephales promelas
EC50 Daphnia 1	> 100 mg/l Daphnia magna
EC50 72h algae (1)	> 100 mg/l Pseudokirchneriella subcapitata
EC50 96h algae (1)	6500 - 13000 mg/l Pseudokirchneriella subcapitata

### 12.2. Persistence and degradability

ANTIFREEZE LIQUID	
Persistence and degradability	Readily biodegradable.

### 12.3. Bioaccumulative potential

ANTI FREEZE LIQUID	
Log Pow	-1,36

### 12.4. Mobility in soil

No additional information available

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### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

Not regulated for transport

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable  
Proper Shipping Name (IMDG) : Not applicable  
Proper Shipping Name (IATA) : Not applicable  
Proper Shipping Name (ADN) : Not applicable  
Proper Shipping Name (RID) : Not applicable

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : Not applicable

#### IMDG

Transport hazard class(es) (IMDG) : Not applicable

#### IATA

Transport hazard class(es) (IATA) : Not applicable

#### ADN

Transport hazard class(es) (ADN) : Not applicable

#### RID

Transport hazard class(es) (RID) : Not applicable

### 14.4. Packing group

Packing group (ADR) : Not applicable  
Packing group (IMDG) : Not applicable  
Packing group (IATA) : Not applicable  
Packing group (ADN) : Not applicable  
Packing group (RID) : Not applicable

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

No data available

#### - Transport by sea

No data available

#### - Air transport

No data available

#### - Inland waterway transport

No data available

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### - Rail transport

No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : > 99 %

#### 15.1.2. National regulations

##### Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

##### Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Full text of R-, H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed
H373	May cause damage to organs through prolonged or repeated exposure
R22	Harmful if swallowed
Xn	Harmful
ERC2	Formulation of preparations
PC35	Washing and cleaning products (including solvent based products)
PROC5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
SU3	Industrial uses: Uses of substances as such or in preparations* at industrial sites

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*