

# SAFETY DATA SHEET



Antifreeze Coolant

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

### 1.1 Product identifier

**Product name** : Antifreeze Coolant  
**Product code** : Not available.  
**Product description** : Not available.  
**Product type** : Liquid.  
**Other means of identification** : Not available.

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

Identified uses	
Additive	
Uses advised against	Reason
Other than described Other than described	

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

Vecom Marine B.V.  
 Mozartlaan 3  
 3144 NA Maassluis  
 The Netherlands  
 Tel.: +31(0)10-5930210

**e-mail address of person responsible for this SDS** : sales@vecom-marine.com

#### National contact

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

**Telephone number** : In case of emergency please contact the Dutch National Poison Control, telephone number: 31-(0)30-2748888. (This number is only accessible to the physician treating the patient and only in case of accidental poisoning)

#### Supplier

**Telephone number** : +31 10 5930210  
**Hours of operation** : 09:00 - 17:00  
**Information limitations** :

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

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

Acute Tox. 4, H302

#### Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

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**SECTION 2: Hazards identification**

- Classification** : Xn; R22
- Human health hazards** : Harmful if swallowed.

See Section 16 for the full text of the R phrases or H statements declared above.  
 See Section 11 for more detailed information on health effects and symptoms.

**2.2 Label elements**

- Hazard pictograms** : 

- Signal word** : Warning
- Hazard statements** : Harmful if swallowed.

**Precautionary statements**

- Prevention** : Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.
- Response** : IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
- Storage** : Not applicable.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

- Hazardous ingredients** : ethanediol
- Supplemental label elements** : Not applicable.

**Special packaging requirements**

- Containers to be fitted with child-resistant fastenings** : Not applicable.
- Tactile warning of danger** : Not applicable.

**2.3 Other hazards**

- Other hazards which do not result in classification** : Not available.

**SECTION 3: Composition/information on ingredients**

- Substance/mixture** : Mixture

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
ethanediol	EC: 203-473-3 CAS: 107-21-1 Index: 603-027-00-1	35-50	Xn; R22  See Section 16 for the full text of the R-phrases declared above.	Acute Tox. 4, H302  See Section 16 for the full text of the H statements declared above.	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

## **SECTION 3: Composition/information on ingredients**

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

Occupational exposure limits, if available, are listed in Section 8.

## **SECTION 4: First aid measures**

### **4.1 Description of first aid measures**

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

There are no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 3 and 15 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.
- Unsuitable extinguishing media** : Do not use water jet.

## **SECTION 5: Firefighting measures**

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

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

### **5.3 Advice for firefighters**

- Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.

## **SECTION 6: Accidental release measures**

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

- For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

- 6.3 Methods and materials for containment and cleaning up** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Preferably clean with a detergent. Avoid using solvents.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

- 7.1 Precautions for safe handling** : Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.  
In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.  
To dissipate static electricity during transfer, earth drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.  
Keep away from heat, sparks and flame. No sparking tools should be used.  
Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Avoid inhalation of dust from sanding.  
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.  
Put on appropriate personal protective equipment (see Section 8).  
Never use pressure to empty. Container is not a pressure vessel.  
Always keep in containers made from the same material as the original one.  
Comply with the health and safety at work laws.
- Information on fire and explosion protection**

## SECTION 7: Handling and storage

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

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

: Store in accordance with local regulations.

#### Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

#### Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
ethanediol	<b>EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values</b> STEL: 104 mg/m <sup>3</sup> 15 minute(s). STEL: 40 ppm 15 minute(s). TWA: 52 mg/m <sup>3</sup> 8 hour(s). TWA: 20 ppm 8 hour(s).

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

#### Derived effect levels

No DELs available.

#### Predicted effect concentrations

No PECs available.

### 8.2 Exposure controls

**Appropriate engineering controls** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

#### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Wear safety glasses with side protection in accordance with EN 166.

## SECTION 8: Exposure controls/personal protection

### Skin protection

**Hand protection** : Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

**Gloves** : Wear suitable gloves tested to EN374.  
The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Body protection** : Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

**Environmental exposure controls** : Do not allow to enter drains or watercourses.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Characteristic.
- Odour threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flash point** : Closed cup: Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Upper/lower flammability or explosive limits** : Not available.
- Vapour pressure** : Not available.
- Vapour density** : Not available.
- Relative density** : 1,04 to 1,05
- Solubility(ies)** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.
- Explosive properties** : Not available.
- Oxidising properties** : Not available.

### 9.2 Other information

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**SECTION 9: Physical and chemical properties**

No additional information.

**SECTION 10: Stability and reactivity**

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : Stable under recommended storage and handling conditions (see section 7).
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
- 10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

There are no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 3 and 15 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
ethanediol	LD50 Oral	Rat	4700 mg/kg	-

**Conclusion/Summary** : Not available.

**Acute toxicity estimates**

Route	ATE value
Oral	1428,6 mg/kg

**Irritation/Corrosion**

**Conclusion/Summary** : Not available.

**Sensitisation**

**Conclusion/Summary** : Not available.

**Mutagenicity**

**Conclusion/Summary** : Not available.

**Carcinogenicity**

**Conclusion/Summary** : Not available.

**SECTION 11: Toxicological information****Reproductive toxicity****Conclusion/Summary** : Not available.**Teratogenicity****Conclusion/Summary** : Not available.**Specific target organ toxicity (single exposure)**

Not available.

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**Other information** : Not available.**SECTION 12: Ecological information****12.1 Toxicity**

There are no data available on the preparation itself.  
Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment.

Product/ingredient name	Result	Species	Exposure
ethanediol	Acute LC50 100000 ug/L Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 10000000 ug/L Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 8050000 ug/L Fresh water	Fish - Pimephales promelas - <=7 days	96 hours

**Conclusion/Summary** : Not available.**12.2 Persistence and degradability****Conclusion/Summary** : Not available.**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
ethanediol	-1,36	-	low

**12.4 Mobility in soil****Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.**Mobility** : Not available.**12.5 Results of PBT and vPvB assessment****PBT** : Not applicable.**vPvB** : Not applicable.**12.6 Other adverse effects** : No known significant effects or critical hazards.



**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

**13.1 Waste treatment methods**

**Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

	<b>ADR/RID</b>	<b>ADN/ADNR</b>	<b>IMDG</b>	<b>IATA</b>
<b>14.1 UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>14.2 UN proper shipping name</b>	-	-	-	-
<b>14.3 Transport hazard class(es)</b>	-	-	-	-
<b>14.4 Packing group</b>	-	-	-	-
<b>14.5 Environmental hazards</b>	No.	No.	No.	No.
<b>14.6 Special precautions for user</b>	<b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	<b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	<b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	<b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
<b>Additional information</b>	-	-	-	-

## **SECTION 14: Transport information**

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## **SECTION 15: Regulatory information**

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

**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorisation**

**Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

**Other EU regulations**

**VOC for Ready-for-Use Mixture** : Not applicable.

**Europe inventory** : All components are listed or exempted.

**Black List Chemicals** : Not listed

**Priority List Chemicals** : Not listed

**Integrated pollution prevention and control list (IPPC) - Air** : Not listed

**Integrated pollution prevention and control list (IPPC) - Water** : Not listed

**Industrial use** : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

**International regulations**

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

**15.2 Chemical Safety Assessment** : This product contains substances for which Chemical Safety Assessments are still required.

**SECTION 16: Other information****CEPE code** : 1

✔ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

<b>Classification</b>	<b>Justification</b>
Acute Tox. 4, H302	Calculation method

**Full text of abbreviated H statements** : H302 Harmful if swallowed.**Full text of classifications [CLP/GHS]** : Acute Tox. 4, H302 ACUTE TOXICITY: ORAL - Category 4**Full text of abbreviated R phrases** : R22- Harmful if swallowed.**Full text of classifications [DSD/DPD]** : Xn - Harmful**Date of printing** : 30-1-2018.**Date of issue/ Date of revision** : 30-1-2018.**Date of previous issue** : 14-12-2017.**Version** : 1.02**Notice to reader**

This material safety data sheet contains information about the properties and safety risks of the product it describes, as known on the date of issue. It does not constitute a guarantee of any property or quality of the product. The information is intended exclusively as a guide to safely operating, storing and transporting the product and what do if it is released.

The information concerns the product itself and does not apply to any application or use of it, whether or not in combination with any other product or in any process. Responsibility for assessing the related implications and risks rests entirely with the user. This material safety data sheet has been compiled with the greatest possible care but is based in part on information in the public domain. For this reason Vecom is unable to accept any liability for the accuracy or completeness of the information.