

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier.

Trade name:	Protective Premium G12 EVO Antifreeze.		
UFI:	18NW-059G-X00X-YHSX		
Article number: 1.2 Relevant identified uses o	4080141: 4080142: 4080143: 4080144: 4080145: 4080146: f the substance	1-liter 4-liter 25-liter 200-liter 1000-liter 0,2-liter or mixture and uses advised against:	
Product use:	Antifreeze.		
Uses advised against:	No further information available.		
1.3 Details of the Supplier of the safety data sheet:			

Supplier: Alde International Systems AB Wrangels Allé 90 SE-291 11 Färlöv Sweden Tel: +46 (0)44 71940

1.4 Emergency telephone number:

Use your national or local emergency number. United Kingdom: Contact The National Poisons Information Service (dial 111, 24 h service).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture according to CLP No 1272/2008/GB CLP. Acute Tox. 4; H302, STOT RE 2; H373.

2.2 Label elements according to CLP No 1272/2008/GB CLP:

Hazard pictograms:



Signal word: Warning

Contains: Ethane-1,2-diol.

Safety data sheet

Protective Premium G12 EVO Antifreeze

Version 1.0 Effective date: 09-01-2024



Hazard statements:

H302 Harmful if swallowed. H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

General: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children.

Prevention: P260 Do not breathe vapors/spray. P264 Wash face, hands and any exposed skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

Response: P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:

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Disposal:

-

Additional labeling:

-

2.3 Other hazards.

Contains no PBT or vPvB substances according to REACH No 1907/2006. This mixture does not contain substances with endocrine disrupting properties in accordance with the criteria laid down in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Product is a mixture.

3.2 Mixture:

CAS/EC No	REACH No	Name	Content %	Classification CLP
107-21-1 / 203-473-3	01-2119456816- 28	Ethane-1,2-diol*	80-98	Acute Tox. 4; H302, STOT RE. 2; H373.
- / -	-	Potassium(2-benzothiazylthio) acetate	0.1<1	Acute Tox. 4; H302, Eye Dam. 1; H318, Repr. 2; H361d, Aquatic Chronic 3; H412.
29385-43-1 / 249-596-6	01-2119979081- 35	Methyl 1H benzotriazole	0.1<1	Acute Tox. 4; H302, Repr. 2; H36d, Aquatic Chronic 2; H412.

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*ATE Ethane-1,2-diol: Oral: 1600 mg/kg Dermal: >3500 mg/kg Inhalation: >2,5 mg/L/6 h.

See full text of H-phrases in section 16. Occupational limits are listed in section 8, if these are available.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:

General information:	In case of doubt or symptoms: Contact a doctor or casualty department, show label if possible. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.	
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If in doubt or if symptoms persist, consult a doctor.	
Skin contact:	Wash skin thoroughly with soap and water. Remove contaminated clothing and wash before re-use.	
Eye contact:	Rinse cautiously with water for at least 15 minutes. If possible, remove contact lenses. If eye irritation persists: Get medical advice/attention.	
Ingestion:	Rinse mouth with water and spit out. Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting occurs, keep head low so that the vomit does not enter the lungs. Seek immediate medical attention.	
 4.2 Most important symptoms and effects, both acute and delayed: Inhalation: Vapors in high concentrations can irritate the respiratory tract. Symptoms after overexposure may include the following: Nausea, vomiting. Dizziness. Fatigue. Ingestion: Harmful if swallowed. Lethal dose for humans 100ml. May cause organ damage (kidneys) through long or repeated exposure if swallowed. Nausea, vomiting. Dizziness. Stomach pain. Skin contact: Prolonged or frequently repeated contact may cause redness and irritation. Can be absorbed through the skin. Eye contact: May cause temporary eye irritation. 		

4.3 Indication of any immediate medical attention and special treatment needed: Treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media: Water or water spray/mist, dry chemical, foam, carbon dioxide (CO2).

Unsuitable extinguishing media:

Water jets should not be used, since they can spread the fire.

5.2 Special hazards arising from the substance or mixture:

In case of fire, toxic smoke develops: Carbon dioxide (CO2). Carbon monoxide (CO). Ketones. Aldehydes.



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5.3 Advice for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent firefighting water from entering the environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

See section 8 for recommendations on the use of personal protective equipment. Ventilate area.

6.2 Environmental precautions:

Avoid discharge to lakes, streams, sewers, etc. Notify authorities if large quantity liquid enters sewers or public waters.

6.3 Methods and material for containment and cleaning up:

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Larger spills are to be absorbed with sand, earth or similar materials. Flush residues away with plenty of water. Collected material is disposed of in accordance with section 13.

6.4 Reference to other sections:

See section 8 for personal protection. See section 13 for disposal.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Wear personal protective equipment. See protective measures under section 8. Ensure good ventilation/exhaustion at the workplace. Smoking, eating, drinking and storing tobacco, food and beverages are not permitted at the workplace. Avoid contact with skin and eyes. Do not breathe vapors/spray.

Hygiene:

Make sure that eyewash station is available. Wash hands after handling the product, especially before eating, drinking and using the toilet. Wash contaminated clothing before reuse. Remove contaminated clothing and protective equipment before entering eating areas. Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities:

The product must be stored in a closed container and in a cool, dry and well-ventilated place. Store separately from food and animal feed. Avoid contact with the following materials: Strong oxidizing agents. Strong acids. Peroxides. Chlorates Inorganic nitrates. Organic nitro compounds.

7.3 Specific end use(s): This product should only be used for applications described in section 1.2.



SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters - occupational exposure limits EH40 (Great Britain) 2020:

CAS-no:	Name:	Limits:	Remarks:
107-21-1	Ethane-1,2-diol vapor	Long-term value: 20 ppm, 52 mg/m ³ Short-term value: 40 ppm, 104 mg/m ³	Sk
107-21-1	Ethane-1,2-diol particulate vapor	Long-term value: 10 mg/m³	Sk

Sk: Can be absorbed through the skin.

DNEL/PNEC:

8.2 Exposure controls.

Appropriate technical measures:

Airborne concentrations must be kept lowest possible. In case the air ventilation in the work room is not sufficient, use for example local exhaust ventilation systems.

General information / Hygiene measures:

Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed.

Personal protective equipment:

Only CE-marked personal protection equipment should be used.

- **Respiratory protection:** Respiratory protection is not required under normal conditions of use.
- Hand protection: Wear gloves. Gloves must conform to EN 374. Consult glove manufacturer to determine appropriate type glove for given application. Option: Nitrile/Butyl/Neoprene gloves. ≥480 min. Thickness: ≥0.38 mm.
- **Eye protection:** Wear tightly safety goggles. EN 166.
- Body protection: Normal work clothing.

Measures to avoid environmental exposure:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Physical state: Colour: Odour: Melting point/freezing point:
Boiling point:
Flammability:
Lower and upper explosion limit:
Flash point:
Auto-ignition temperature:
Decomposition temperature:
pH:
Kinematic viscosity:
Solubility:
Partition coefficient n-octanol/water:
Vapour pressure:
Density and/or relative density:
Relative vapour density:
Particle characteristics:

Liquid Red Characteristic -18°C ≥163°C Not relevant/no data Not relevant/no data 122°C - Pensky-Martens closed cup. 398°C Not relevant/no data 8.5 Not relevant/no data Not relevant/no data Not relevant/no data Not relevant/no data 1.1195 kg/l Not relevant/no data Not relevant/no data

9.2 Other information:

None known.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:	No dangerous reaction known under conditions of normal use and storage.	
10.2 Chemical stability:	Stable under normal temperature conditions and recommended use.	
10.3 Possibility of hazardous	reactions: No risk of hazardous reactions during normal use and storage.	
10.4 Conditions to avoid:	Avoid strong heat for prolonged periods of time.	
10.5 Incompatible materials:	Strong acids. Strong oxidizing agents. Inorganic nitrates. Organic nitro compounds. Peroxides. Chlorates.	
10.6 Hazardous decomposition products:		

None at recommended storage conditions and use.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008/GB CLP.

Acute toxicity:

Harmful if swallowed.

Product: Oral – ATE: 1739,13 mg/kg

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ATE Ethane-1,2-diol: Oral: 1600 mg/kg Dermal: >3500 mg/kg Inhalation: >2,5 mg/L/6 h.			
Not classified.			
: Not classified.			
ion: Not classified.			
Not classified.			
Not classified.			
Not classified.			
- single exposure: Not classified.			
Specific target organ toxicity – repeated exposure: May cause damage to organs through prolonged or repeated exposure.			
Not classified.			
ards:			
ies: The product/substance has no endocrine disrupting properties.			
Inhalation: Vapors in high concentrations can irritate the respiratory tract. Symptoms after overexposure may include the following: Nausea, vomiting. Dizziness. Fatigue. Ingestion: Harmful if swallowed. Lethal dose for humans 100ml. May cause organ damage (kidneys) through long or repeated exposure if swallowed. Nausea, vomiting. Dizziness. Stomach pain. Skin contact: Prolonged or frequently repeated contact may cause redness and irritation. Can be absorbed through the skin. Eye contact: May cause temporary eye irritation.			

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity:

Not classified harmful to the environment.

 $\label{eq:constraint} \begin{array}{l} \mbox{Ethane-1,2-diol}-\mbox{CAS 107-21-1:} \\ \mbox{Fish}-\mbox{LC50}-\mbox{96 h.: 78860 mg/L} & -\mbox{ECHA} \\ \mbox{Daphnia}-\mbox{EC50}-\mbox{48 h.: } & -\mbox{100 mg/L} \\ \mbox{Algae}-\mbox{IC50}-\mbox{96 h.: } & 6500-13000 mg/L \\ \end{array}$

12.2 Persistence and degradability:

Ethane-1,2-diol – CAS 107-21-1: 10 days - 90 - 100% - OECD 301A. Easily biodegradable.

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12.3 Bioaccumulative potential:

Ethane-1,2-diol – CAS 107-21-1: LogPow: -1.36 - bioaccumulation is unlikely.

12.4 Mobility in soil: No data.

12.5 Result of PBT and vPvB assessment:

The product does not meet the criteria for PBT or vPvB.

12.6 Endocrine disrupting properties:

The product/substance has no endocrine disrupting properties.

12.7 Other adverse effects: None known.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste	treatment	methods:
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Avoid release to the environment. Must be disposed of in accordance with local and national regulations. The given EWC-code is a guiding, and the code depends on how the waste is formed. User must evaluate the choice of correct code. Option:

EWC-Code: 16 01 14* antifreeze fluids containing dangerous substances.

Contaminated packing: 15 01 10* packaging containing residues of or contaminated by dangerous substances.

SECTION 14. TRANSPORT INFORMATION

This product is not classified as dangerous to transport.

	ADR/RID	IMDG/IMO
14.1 UN number or ID number	Not relevant	Not relevant
14.2 UN proper shipping name	Not relevant	Not relevant
14.3 Transport hazard class(es)	Not relevant	Not relevant
14.4 Packing group	Not relevant	Not relevant
14.5 Environmental hazards – MP EmS:	No Not relevant	No Not relevant
Other informations	LQ: Not relevant Tunnel: Not relevant	LQ: Not relevant Tunnel: Not relevant

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14.6 Special precautions for user:

Not relevant

14.7 Maritime transport in bulk according to IMO instruments:

Not relevant

SECTION 15. REGULATORY INFORMATION

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

Current ADR regulations 2023. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013. Regulation (EU) 2016/425 of 9 March 2016 on personal protective equipment. Hazardous Waste (England and Wales) Regulations 2005 (as amended). EC regulation 1907/2006 (REACH) Directive 2000/532/EC. Seveso directive: 96/82/EC. EC regulation No 2020/878. CLP regulation No 1272/2008. REACH regulation 1907/2006. GB CLP.

Additional information: People under the age of 18 must not be exposed to this product cf. Council Directive 94/33/EC.

15.2 Chemical safety assessment:

Chemical safety assessments have not been performed for this product.

SECTION 16. OTHER INFORMATION

Full text of H-phrases as mentioned in section 3: H302 Harmful if swallowed. H318 Causes serious eye damage. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects.

Additional information: 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.

Descriptions of possible used abbreviations:

BCF Bioconcentration factor.

BOD Biochemical Oxygen Demand.

CAS Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances).

COD Chemical oxygen demand.

DNEL Derived No-Effect Level.

EC50 Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval.

IMDG International Maritime Dangerous Goods Code.

LC50 Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval.

LD50 Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval.

log KOW n-Octanol/water.

MARPOL International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant"). PBT Persistent, Bioaccumulative and Toxic.

PNEC Predicted No-Effect Concentration.

UN RTDG UN Recommendations on the Transport of Dangerous Good.

vPvB Very Persistent and very Bioaccumulative.

Validated by: SRS - www.msds-eu.com