

ANTI FREEZE BLUE/DEMI (S1191)

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In case of emergency:

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 Antipoison Center - Brussels :
 TEL: 070/245.245

The Netherlands:

National Poisoning Information Center - Bilthoven :
 TEL: 030/274.88.88

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Identification of the product

- Type of product : Preparation .
- Use of product : Several industrial applications (Anti freeze agent , ...).
- Company identification : See heading of Material Safety Data Sheet.
- Emergency phone number : See heading of Material Safety Data Sheet.

2. HAZARD IDENTIFICATION

Harmful (Xn) : R22 - Harmful if swallowed.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

HARMFUL COMPONENT(S)

Name component(s)	Weight %	CAS nr / EINECS nr / EC annex nr	Symbol(s)	R-Phrase(s)
<u>Ethylene glycol</u>	: ca. 29 %	107-21-1 / 203-473-3 / 603-027-00-1	Xn	22
Limit value (Belgium)	: 20 ppm (52 mg/m ³) (2007) (D) (M)			
Short time value (Belgium)	: 40 ppm (104 mg/m ³) (2007) (D) (M)			
Limit value (TWA 8 h) (The Netherlands)	: 20 ppm (52 mg/m ³) (2007) (H)			
Limit value (TWA 15 min) (The Netherlands)	: 40 ppm (104 mg/m ³) (2007) (H)			

*

The full text of the R-phrases is in chapter 16.

(D) The mention "D" means that the absorption of the agent by skin, mucous membranes or eyes constitutes an important part of the total exposition. This absorption can be the consequence of direct contact as well as his presence in the air.

(H) The addition of an "H" indicates that the substance is relative easily absorbed by the skin.

(M) The mention "M" means that the exposition above the limit value causes irritation or that there is a danger for acute poisoning. The work procedure has to be designed somehow or other that the exposition doesn't exceed the limit value. During a control, the sample period should be so short as possible to carry out a reliable measurement. The mesure result is then related to the considered period.

4. FIRST AID MEASURES

General : In case of doubt or persistent symptoms, call a physician.
 Never give anything by mouth to an unconscious person.

First Aid Measures

- * - Inhalation : Remove victim into fresh air.
 Allow the affected person to rest.
 If not breathing, give artificial respiration.
 Consult a doctor.
- Skin Contact : Remove contaminated clothing.
 Rinse skin immediately with mild soap and plenty of water. (shower if necessary).
 Seek medical advice.
- * - Eye Contact : Rinse immediately thoroughly and long (at least 15 min.) with plenty of water.

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4. FIRST AID MEASURES (continued)

- Ingestion : Remove contact lenses.
Consult eye doctor.
Do not use a neutralisation agent.
: DO NOT INDUCE VOMITING. Rinse mouth with water.
Give 2 glasses of water to drink.
Take patient to hospital IMMEDIATELY.

5. FIRE-FIGHTING MEASURES

- Extinguishing Media : Powder , Water spray , Carbon dioxide , Alcohol resistant foam .
- Suitable : Apply water spray or fog to cool nearby equipment. Avoid fire-fighting water to enter environment.
- Special Procedures : Fire may liberate carbon oxides (CO) and smoke.
- Special Exposure Hazards : Use self-contained breathing apparatus when in close proximity to fire.
- Special Protective Equipment for Firefighters

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions : Eliminate every possible source of ignition (open fire, sparks, smoking, ...).
Evacuate all personnel immediately and ventilate area.
Avoid breathing vapour and contact with skin, eyes and clothing. Wear recommended personal protective equipment. (See chapter 8).
- Environmental Precautions : Shut off leaks if without risks.
Dike in the spilled product as much as possible with inert material.
Prevent entry of product in public water, sewers or soil.
Notify authorities if product enters sewers or public waters.
- Methods for Cleaning Up : Collect the spillage in closable, suitable disposal containers.
Clean up any spills as soon as possible, using an inert absorbent material and eliminate as hazardous waste. (See chapter 13).
Residue is to be washed down with plenty of water.

7. HANDLING AND STORAGE

- * Handling : STRONG HYGIENE !
Avoid breathing vapour and contact with skin, eyes and clothing. Wear recommended personal protective equipment. (See chapter 8).
- Protection against Fire and Explosion : Eliminate every possible source of ignition (open fire, sparks, smoking, ...).
- * Storage : Keep only in the original, safely locked container in a well ventilated and dry place.
Keep away from : Oxidizing agents , Oxidizing acids .
- Packaging Material : Carbon steel , Stainless steel , Aluminium .
- Insuitable Packaging Material : Some plastics.

8. MEASURES EXPOSURE CONTROL / PERSONAL PROTECTION

- Engineering Measures : Ventilate area.
- Industrial Hygiene : When using, do not eat, drink or smoke.
- * Occupational Exposure Limits : For components: see chapter 3.
- Personal Protection Equipment : Ventilation , Local exhaust , Respiratory protection equipment (Filter type A).
- Respiratory Protection : Gloves (Butyl rubber, PVC, ...).
- Hand Protection : Closed safety glasses or face shield.
- * - Eye Protection : Suitable protective clothing .
- Skin and Body Protection

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State (20°C)	: Liquid .
Form/Colour	: Clear , Blue.
Odour	: Odourless.
pH value	: No data available.
Boiling Point/Range (1013 hPa)	: app. 103 °C
Congeaing/Melting point	: app. -15 °C
Flash point	: > 100 °C
Auto-ignition temperature	: app. 400 °C
Explosion limits in air	: No data available.
Density (20°C)	: 1,04 kg/l
Solubility in water	: Complete solubility.

10. STABILITY AND REACTIVITY

Stability	: Stable at normal circumstances.
Conditions to avoid	: None .
Materials to avoid	: Oxidizing agents , Oxidizing acids .
Hazardous Decomposition Products	: Fire may liberate carbon oxides (CO) and smoke.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
- Inhalation	: High concentrations may produce central nervous system depression and loss of consciousness (diminuation of consciousness). Symptoms include: Headache , Dizziness , Sore throat , Cough , Drowsiness , Nausea .
- Skin contact	: May be irritating for the skin. Symptoms include: Redness , Pain .
*	: For components:
*	: • Ethylene glycol : LD50 (Rabbit, dermal) : > 10000 mg/kg
- Eye contact	: May be irritating to eyes. Symptoms include: Redness , Pain .
- Ingestion	: Harmful if swallowed. Symptoms include: Abdominal pain , Vomiting , Nausea .
*	: For components:
*	: • Ethylene glycol : LD50 (Rat, oral) : > 2000 mg/kg
Chronic toxicity	: Skin contact may cause an eczema-like skin disorder. May cause damage to kidney and liver.
Other toxicological information	: Alcohol will intensify the harmful action. The product may cause central nervous system depression. Heart and lung deviations may occur.
*	: For components:
*	: Information on the webaddress http://ecb.jrc.it/ESIS (see IUCLID Data Sheets).

12. ECOLOGICAL INFORMATION

Mobility	: Product completely soluble in water.
Persistence and degradability	: No data available.
Bioaccumulation	: Bioaccumulation not expected .
* Ecotoxicity	: For components:
*	: • Ethylene glycol : LC50 (Fish, 24 h) : > 5000 mg/l
* Other ecological information	: For components:

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12. ECOLOGICAL INFORMATION (continued)

* : Information on the webaddress <http://ecb.jrc.it/ESIS> (see IUCLID Data Sheets).

13. DISPOSAL CONSIDERATIONS

- Waste from residues/Unused products : The product has to be destroyed according to national or local legislation, by a company specialised in handling hazardous waste products.
- Removal contaminated packaging : Packing is to be used exclusively for the packing of this product.
After use, empty and close the packing very carefully.
In case of returned packing, the empty packing can be offered back to the supplier.
- * European list of waste products : European waste product code: ' XX XX XX '. This code is assigned on the basis of the most current applications and can not be representative for pollutions which are arisen at the effective use of the product. The producer of the waste has to evaluate its process himself and has to grant the appropriate waste coding. See directive 2001/118/EC.

14. TRANSPORT INFORMATION

- * Land (Road/Railroad, ADR/RID) : Not considered as a dangerous product for ADR transport.
- * Sea Transport (IMDG) : Not considered as a dangerous product for sea transport.

15. REGULATORY INFORMATION

Name dangerous component(s) : Ethylene glycol .
Symbol(s) : Harmful (Xn).



R-Phrases : R22 - Harmful if swallowed.
S-Phrases : None .

16. OTHER INFORMATION

- * This safety data sheet has been drawn up in accordance with the EC Regulation n° 1907/2006.
This safety data sheet is exclusively made for industrial/professional use.
Classification and labelling in accordance with the Directive 1999/45/EC.
- * Has changed compared to previous revision.
- * Changes : General revision .
- R-phrases : R22 - Harmful if swallowed.
- * Sources of used key data : The information contained herein is based on the present state of our knowledge (Producers of starting materials , Chemical cards , ...).

This information is to our knowledge correct and complete on the date of issue of this safety data sheet. The information only concerns the product and does not give any guarantee for the quality and the completeness of the properties of the product, or in case of mixing or using in any other process. It remains the responsibility of the user to assure himself that the information is suitable and complete concerning the special use he makes of the product.

BRENTAG denies all responsibility for loss or damage resulting from the use of these data.

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