



## SAFETY DATA SHEET

ANTIFREEZE

Page 1

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Revision No: 5

### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Product name:** ANTIFREEZE

**Use of substance / preparation:** Engine antifreeze and coolant.

**Company name:** Unicorn Chemicals Ltd

Unicorn House

Mowbray Drive

Blackpool

Lancashire

FY3 7UN

Tel: 01253 396101

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Email: enquiries@unicornchemicals.com

### 2. HAZARDS IDENTIFICATION

**Main hazards:** Harmful if swallowed.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous ingredients:** ETHYLENE GLYCOL >90%

EINECS: 203-473-3 CAS: 107-21-1

[Xn] R22

- 2-ETHYLHEXANOIC ACID, POTASSIUM SALT <10%

EINECS: 221-625-7 CAS: 3164-85-0

[Xn] R63

### 4. FIRST AID MEASURES (SYMPTOMS)

**Skin contact:** There may be irritation and redness at the site of contact. Ethylene Glycol presents a skin resorption hazard.

**Eye contact:** There may be irritation and redness.

**Ingestion:** Harmful by ingestion-100ml may prove fatal. Nausea and stomach pain may occur. There may be vomiting. There may be loss of consciousness. Convulsions may occur.

**Inhalation:** Exposure may cause coughing or wheezing. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness. Convulsions may occur.

### 4. FIRST AID MEASURES (ACTION)

**Skin contact:** Wash thoroughly with soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

**Ingestion:** Immediately rinse mouth and then drink plenty of water. Get prompt medical attention.

**Inhalation:** Remove to fresh air. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

[cont...]

**SAFETY DATA SHEET**

ANTIFREEZE

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media:** Water spray. Alcohol or polymer foam. Dry chemical powder. Carbon dioxide.

**Exposure hazards:** In combustion emits toxic fumes.

**Protection of fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Mark out the contaminated area with signs and prevent access to unauthorised personnel.  
Turn leaking containers leak-side up to prevent the escape of liquid.

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using sufficient appropriate absorbent material.

**Clean-up procedures:** Absorb into dry earth or sand. Wash the spillage site with large amounts of water.

**7. HANDLING AND STORAGE**

**Handling requirements:** Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Hazardous ingredients:** ETHYLENE GLYCOL  
WEL (8 hr TWA): 52 mg/m<sup>3</sup> WEL (15 min STEL): 104 mg/m<sup>3</sup> (Sk)

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** If Workplace Exposure Limit(s) listed above are exceeded, respiratory protection may be required.

**Hand protection:** Where hand contact with the product may occur the use of chemical resistant gloves, approved to relevant standards, made from the following materials may provide suitable chemical protection: PVC or nitrile gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. (Sk) noted above means can be absorbed through skin.

**Eye protection:** Safety goggles.

**Skin protection:** Protective overalls.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**State:** Liquid

**Odour:** Faint

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Miscible

**Viscosity:** Slightly viscous.

**Boiling point/range°C:** >150

**SAFETY DATA SHEET**

ANTIFREEZE

**Flash point°C:** >100**Autoflammability°C:** >200**Relative density:** 1.13**pH:** 7**10. STABILITY AND REACTIVITY****Stability:** Stable under normal conditions.**Conditions to avoid:** Moisture.**Materials to avoid:** Strong oxidising agents.**11. TOXICOLOGICAL INFORMATION****Hazardous ingredients:** ETHYLENE GLYCOL  
IVN RAT LD50 3260 mg/kg  
ORL MUS LD50 5500 mg/kg  
ORL RAT LD50 4700 mg/kg**Routes of exposure:** Harmful by ingestion and as vapour. Death has followed drinking of ethylene glycol as a substitute for spirits. (100ml may prove fatal). Can cause restlessness, unsteady gait, drowsiness, coma and injury to kidneys. May cause eye irritation.**12. ECOLOGICAL INFORMATION****Mobility:** The product will dissolve slowly in water.**Other adverse effects:** Should not be discharged directly in concentrated form to water courses.**13. DISPOSAL CONSIDERATIONS****Disposal operations:** Contact Unicorn Chemicals Ltd to arrange disposal.**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.**14. TRANSPORT INFORMATION****ADR / RID****UN no:** Not Classified.**IMDG / IMO****UN no:** Not Classified.**IATA / ICAO****UN no:** Not Classified.**15. REGULATORY INFORMATION****Hazard symbols:** Harmful.

**SAFETY DATA SHEET**

ANTIFREEZE

**Risk phrases:** R22: Harmful if swallowed.

**Safety phrases:** S2: Keep out of the reach of children.

S24/25: Avoid contact with skin and eyes.

S46: If swallowed, seek medical advice immediately and show this container or label.

**Haz. ingredients (label):** ETHYLENE GLYCOL

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

**16. OTHER INFORMATION**

**Other information:** A 50% solution of this product in water will prevent freezing to at least -34°C; a 33.3% solution to at least -18°C.

Always use in accordance with manufacturer's directions.

This product belongs to Hazard Group B under the HSE COSHH Essentials guidelines (Publication HSG193).

This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006.

**Risk phrases used in s.3:** R22: Harmful if swallowed.

R63: Possible risk of harm to the unborn child.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.