



SAFETY DATA SHEET

THOR

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Issued: 28/02/06

Revision No: 2

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

Product name: THOR

Use / description of product: De-Icer.

Company name: Unicorn Chemicals Ltd

Unicorn House

Mowbray Drive

Blackpool

Lancashire

FY3 7UN

Tel: 01253 396101

Fax: 01253 302895

2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients: PROPAN-2-OL 70-90%

EINECS: 200-661-7 CAS: 67-63-0

[F] R11; [Xi] R36; [-] R67

- ETHYLENE GLYCOL 10-30%

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

[Xn] R22

3. HAZARDS IDENTIFICATION

Main hazards: Highly flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness.

Other hazards: In use, may form flammable / explosive vapour-air mixture.

4. FIRST AID MEASURES (SYMPTOMS)

Skin contact: There may be irritation and redness at the site of contact. Prolonged or repeated contact may defat the skin leading to dermatitis.

Eye contact: There may be irritation and redness. The eyes may water profusely. There may be severe pain.

Ingestion: Aerosol packs make the possibility of ingestion unlikely, however if this should occur, irritation of mouth/throat, nausea and stomach pain may result.

Inhalation: Inhalation of high levels of vapour may cause upper respiratory tract irritation. Drowsiness or mental confusion may occur. There may be loss of consciousness.

4. FIRST AID MEASURES (ACTION)

Skin contact: Wash with soap and water. Seek medical advice if irritation develops.

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

Ingestion: If affected, seek medical advice.

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

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5. FIRE-FIGHTING MEASURES

Extinguishing media: Carbon dioxide. Alcohol resistant foam.

Exposure hazards: Highly flammable. Vapour may travel considerable distance to source of ignition and flash back.
Forms explosive air-vapour mixture.

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: Eliminate all sources of ignition. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

Environmental precautions: Contain the spillage using sufficient appropriate absorbent material.

Clean-up procedures: If spillage is from leaking/punctured cans, ensure adequate ventilation and allow propellant to evaporate. Wipe up liquid spillage with absorbent material and dispose of safely.

7. HANDLING AND STORAGE

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

Storage conditions: Store in a cool, well ventilated area, below 50°C. Keep away from sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Hazardous ingredients: PROPAN-2-OL

WEL (8 hr exposure limit): 999 mg/m³ WEL (15 min exposure limit): 1250 mg/m³

- ETHYLENE GLYCOL

WEL (8 hr exposure limit): 52 mg/m³ WEL (15 min exposure limit): 104 mg/m³ (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: Protective gloves.

Eye protection: Safety goggles.

Skin protection: Protective overalls.

9. PHYSICAL AND CHEMICAL PROPERTIES

State: Aerosol

Colour: Colourless

Odour: Alcoholic

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Soluble

Flammability limits %: lower: 2.0

upper: 12.0

Flash point°C: 12

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to avoid: Hot surfaces. Sources of ignition. Flames.

Materials to avoid: Oxidising agents.

11. TOXICOLOGICAL INFORMATION

Hazardous ingredients: PROPAN-2-OL
IVN RAT LD50 1088 mg/kg
ORL MUS LD50 3600 mg/kg
ORL RAT LD50 5045 mg/kg
SCU MUS LDLO 6 gm/kg

- ETHYLENE GLYCOL
IVN RAT LD50 3260 mg/kg
ORL MUS LD50 5500 mg/kg
ORL RAT LD50 4700 mg/kg

Routes of exposure: Exposure to high levels of vapour may cause drowsiness, dizziness, nausea, headaches, vomiting. Prolonged contact with skin may cause irritation leading to dermatitis in extreme cases. May cause eye irritation.

12. ECOLOGICAL INFORMATION

Mobility: Soluble in water.

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: 1950

ADR Class: 2

Classification code: 5A

Shipping name: AEROSOLS

Labelling: 2.2



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IMDG / IMO

UN no: 1950 **Class:** 2
EmS: F-D,S-U **Marine pollutant:** .
Labelling: 2.2

IATA / ICAO

UN no: 1950 **Class:** 2
Labelling: 2.2

15. REGULATORY INFORMATION

Hazard symbols: Highly flammable.

Irritant.



Risk phrases: R11: Highly flammable.

R36: Irritating to eyes.

R67: Vapours may cause drowsiness and dizziness.

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

S16: Keep away from sources of ignition - No smoking.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S51: Use only in well-ventilated areas.

Precautionary phrases: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

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: This product belongs to Hazard Groups A and S under the HSE COSHH Essentials guidelines. (Publication HSG193).

Always use in accordance with manufacturer's directions.

This safety data sheet is prepared in accordance with EC Directive 2001/58/EC.

Risk phrases used in s.2: R11: Highly flammable.

R36: Irritating to eyes.

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R67: Vapours may cause drowsiness and dizziness.

R22: Harmful if swallowed.

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.