

# SAFETY DATA SHEET

DE-ICER

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Revision No: 1

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

**Product name:** DE-ICER

**Synonyms:** DI500

**Use / description of product:** Liquid. Irritant. Extremely flammable.

**Company name:** Specialised Aerosols Company Limited

Carr Green Lane

Mapplewell

Barnsley

South Yorkshire

S75 6DY

Tel: 01226 387101

Fax: 01226 387100

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous ingredients:** PROPAN-2-OL 10-30%

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

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

- ETHANOL 30-50%

EINECS: 200-578-6 CAS: 64-17-5

[F] R11

- PROPAN-1-OL 1-10%

EINECS: 200-746-9 CAS: 71-23-8

[F] R11; [Xi] R41; [-] R67

- BUTANE 1-10%

EINECS: 203-448-7 CAS: 106-97-8

[F+] R12

- ETHYLENE GLYCOL 1-10%

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

[Xn] R22

## 3. HAZARDS IDENTIFICATION

**Main hazards:** Extremely 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.

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

**Ingestion:** Nausea and stomach pain may occur. There may be vomiting. Inhalation of fumes from the stomach may cause symptoms similar to direct inhalation.

**Inhalation:** Nausea and stomach pain may occur. There may be vomiting. Drowsiness or mental confusion may occur. There may be loss of consciousness.

[cont...]

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**4. FIRST AID MEASURES (ACTION)**

- Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.
- Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
- Ingestion:** Do not induce vomiting. If conscious, give half a litre of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.
- Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

**5. FIRE-FIGHTING MEASURES**

- Extinguishing media:** Carbon dioxide.
- Exposure hazards:** Extremely flammable. In combustion emits toxic fumes. 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. 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 bunding.
- Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water. Do not use equipment in clean-up procedure which may produce sparks.

**7. HANDLING AND STORAGE**

- Handling requirements:** Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance. Smoking is forbidden. Use non-sparking tools.
- Storage conditions:** Store in cool, well ventilated area. Keep away from sources of ignition. Keep container tightly closed.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

- Hazardous ingredients:** PROPAN-2-OL  
TWA (8 hr exposure limit): 999 mg/m<sup>3</sup> STEL (15 min exposure limit): 1250 mg/m<sup>3</sup> (OES)
- ETHANOL  
TWA (8 hr exposure limit): 1920 mg/m<sup>3</sup> (OES)
  - PROPAN-1-OL  
TWA (8 hr exposure limit): 500 mg/m<sup>3</sup> STEL (15 min exposure limit): 625 mg/m<sup>3</sup> (OES)

[cont...]

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- BUTANE  
TWA (8 hr exposure limit): 1450 mg/m<sup>3</sup> STEL (15 min exposure limit): 1810 mg/m<sup>3</sup> (OES)
- ETHYLENE GLYCOL  
TWA (8 hr exposure limit): 60 mg/m<sup>3</sup> STEL (15 min exposure limit): 125 mg/m<sup>3</sup> (OES)

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

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Protective gloves.

**Eye protection:** Safety goggles.

**Skin protection:** Protective clothing with elasticated cuffs and closed neck. Boots made of PVC.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**State:** Liquified gas

**Colour:** Colourless

**Odour:** Characteristic odour

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

**Solubility in water:** Soluble

**Flammability limits %: lower:** 0.8

**upper:** 12.0

**10. STABILITY AND REACTIVITY**

**Stability:** Stable under normal conditions.

**Conditions to avoid:** Heat. Sources of ignition. Flames.

**Materials to avoid:** Strong oxidising agents. Strong alkalis. Mineral Acids.

**Haz. decomp. products:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

**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

- ETHANOL

IVN RAT LD50 1440 mg/kg

ORL MUS LD50 3450 mg/kg

ORL RAT LD50 7060 mg/kg

- PROPAN-1-OL

IVN RAT LD50 590 mg/kg

ORL MUS LD50 6800 mg/kg

ORL RAT LD50 1870 mg/kg

- ETHYLENE GLYCOL

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IVN RAT LD50 3260 mg/kg

ORL MUS LD50 5500 mg/kg

ORL RAT LD50 4700 mg/kg

**Chronic toxicity:** Ingestion. Inhalation. Skin and/or eye contact.**Routes of exposure:** May cause irritation to the respiratory system. Vapours may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system. May cause discomfort if swallowed. May cause stomach pain or vomiting. Gastrointestinal symptoms, including upset stomach. Prolonged or repeated exposure may cause severe irritation. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Irritating to eyes. May cause chemical eye burns.**12. ECOLOGICAL INFORMATION****Other adverse effects:** Dangerous for the environment if discharged into watercourses.**13. DISPOSAL CONSIDERATIONS****Disposal of packaging:** Empty containers must not be burned because of explosion hazard.**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**Shipping name:** AEROSOLS**Labelling:** 2.1**IMDG / IMO****UN no:** 1950**Class:** 2**EmS:** F-D,S-U**Marine pollutant:** No**Labelling:** 2.1**IATA / ICAO****UN no:** 1950**Class:** 2**Labelling:** 2.1**15. REGULATORY INFORMATION****Hazard symbols:** Irritant.

Extremely flammable.



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**Risk phrases:** R12: Extremely 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.  
S23: Do not breathe vapour.  
S25: Avoid contact with eyes.  
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S51: Use only in well-ventilated areas.

**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

**Risk phrases used in s.2:** R11: Highly flammable.  
R36: Irritating to eyes.  
R67: Vapours may cause drowsiness and dizziness.  
R41: Risk of serious damage to eyes.  
R12: Extremely flammable.  
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.