



## SAFETY DATA SHEET

TDI FLUSHING SOLVENT

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Issued: 11/03/09

Revision No: 5

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

**Product name:** TDI FLUSHING SOLVENT

**Use of substance / preparation:** Flushing solvent for TDI engines.

**Company name:** Unicorn Chemicals Ltd

Unicorn House

Mowbray Drive

Blackpool

Lancashire

FY3 7UN

Tel: 01253 396101

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Emergency tel: 01253 396101 (Office hours: 09:00 - 17:00)

Email: enquiries@unicornchemicals.com

### 2. HAZARDS IDENTIFICATION

**Main hazards:** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Harmful: may cause lung damage if swallowed.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous ingredients:** ODOURLESS KEROSENE 70-90%

EINECS: 265-149-8 CAS: 064742-47-8

[Xn] R65; [N] R51/53

- D-LIMONENE (INHIBITED) 1-10%

CAS: 5989-27-5

[-] R10; [Xi] R36/38; [N] R50/53

### 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:** There may be shortness of breath due to congestion of the lungs. 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.

### 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.

[cont...]

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**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. Alcohol or polymer foam. Dry chemical powder.

**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:** Wash away spillage residues to foul sewer.

**7. HANDLING AND STORAGE**

**Handling requirements:** Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance. Do not breathe vapour. Do not handle in a confined space.

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Hazardous ingredients:** ODOURLESS KEROSENE  
WEL (8 hr TWA): 1000mg/m<sup>3</sup>

- D-LIMONENE (INHIBITED)

WEL (8 hr TWA): 560mg/m<sup>3</sup> WEL (15 min STEL): 840mg/m<sup>3</sup>

**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. Nitrile. Neoprene. 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.

**Eye protection:** Safety goggles.

**Skin protection:** Protective overalls.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**State:** Liquid

**Colour:** Colourless

**Odour:** Citrus.

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

**Solubility in water:** Insoluble

**Viscosity:** Non-viscous

**Boiling point/range°C:** 195

**Flammability limits %: lower:** 0.9

**upper:** 8.0

**Flash point°C:** 70

**Autoflammability°C:** >250

**Relative density:** 0.8

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions.

**Conditions to avoid:** Heat. Flames. Sparks.

**Materials to avoid:** Strong acids. Strong bases. Strong oxidising agents.

## 11. TOXICOLOGICAL INFORMATION

**Hazardous ingredients:** D-LIMONENE (INHIBITED)

ORL RAT LD50 >5 g/Kg

SKN RBT LD50 >5 g/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.

## 12. ECOLOGICAL INFORMATION

**Hazardous ingredients:** ODOURLESS KEROSENE

ALGAE 72H IC50 20 ppm

DAPHNIA 24H EC50 >250 ppm

FISH 96H LC50 >1000 ppm

**Mobility:** Insoluble in water. Volatile. Floats on water.

**Other adverse effects:** Toxic to aquatic organisms.

**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**

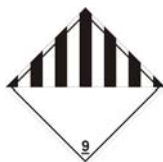
**UN no:** 3082

**ADR Class:** 9

**Shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ODOURLESS KEROSENE)

**Labelling:** 9

**Hazard ID no:** 90

**IMDG / IMO**

**UN no:** 3082

**Class:** 9

**Packing group:** III

**EmS:** F-A,S-F

**Marine pollutant:** .

**Labelling:** 9

**IATA / ICAO**

**UN no:** 3082

**Class:** 9

**Packing group:** III

**Packing instructions:** 914

**Labelling:** 9

**15. REGULATORY INFORMATION**

**Hazard symbols:** Harmful.

Dangerous for the environment.



**Risk phrases:** R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65: Harmful: may cause lung damage if swallowed.

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

S23: Do not breathe ...

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S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

S62: If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

**Haz. ingredients (label):** ODOURLESS KEROSENE

**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:** D-Limonene used in this product contains anti-oxidant (bht) which eliminates the requirement for R43 classification (May cause sensitisation by skin contact).

Always use in accordance with manufacturer's directions.

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

**Risk phrases used in s.3:** R65: Harmful: may cause lung damage if swallowed.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R10: Flammable.

R36/38: Irritating to eyes and skin.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**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.