



## SAFETY DATA SHEET

D.A.C.

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Issued: 07/03/06

Revision No: 4

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

**Product name:** D.A.C.

**Use / description of product:** Durable asphaltic coating.

**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:** BITUMEN 30-50%

CAS: 64742-93-4

[Xn] R40

- XYLENE 10-30%

EINECS: 215-535-7 CAS: 1330-20-7

[-] R10; [Xn] R20/21; [Xi] R38

- WHITE SPIRIT 10-30%

[-] R10; [N] R51/53; [Xn] R65; [-] R66; [-] R67

- PROPAN-2-OL 1-10%

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

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

- BUTANE 1-10%

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

[F+] R12

- PROPANE 1-10%

EINECS: 200-827-9 CAS: 74-98-6

[F+] R12

### 3. HAZARDS IDENTIFICATION

**Main hazards:** Extremely flammable. Harmful by inhalation and in contact with skin. Limited evidence of a carcinogenic effect. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 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.

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

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

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

**Skin contact:** Wash skin thoroughly with soap and warm water. Dry skin and apply replenishing cream. 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.

**5. FIRE-FIGHTING MEASURES**

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

**Exposure hazards:** Extremely flammable. Forms explosive air-vapour mixture. 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. Eliminate all sources of ignition. Wear appropriate protective clothing.

**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. Smoking is forbidden. Avoid direct contact with the substance. Wear appropriate protective clothing when handling this product.

**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:** XYLENE

WEL (8 hr exposure limit): 220 mg/m<sup>3</sup> WEL (15 min exposure limit): 441 mg/m<sup>3</sup> (Sk)

- WHITE SPIRIT

WEL (8 hr exposure limit): 100ppm

- PROPAN-2-OL

WEL (8 hr exposure limit): 999 mg/m<sup>3</sup> WEL (15 min exposure limit): 1250 mg/m<sup>3</sup>

- BUTANE

WEL (8 hr exposure limit): 1450 mg/m<sup>3</sup> WEL (15 min exposure limit): 1810 mg/m<sup>3</sup>

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- PROPANE

WEL (8 hr exposure limit): 1800 mg/m<sup>3</sup> WEL (15 min exposure limit): 7200 mg/m<sup>3</sup>

**Engineering measures:** Ensure there is sufficient ventilation of the area. Do not handle in a confined space.

**Respiratory protection:** Use self contained breathing apparatus if handling in a confined area or if spray mist is generated.

**Hand protection:** Protective gloves. (Sk) noted above means can be absorbed through skin.

**Eye protection:** Safety goggles.

**Skin protection:** Protective clothing with elasticated cuffs and closed neck.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**State:** Aerosol

**Colour:** Black

**Odour:** Paraffinic

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

**Solubility in water:** Insoluble

**Flammability limits %: lower:** 0.8

**upper:** 12.0

**Flash point°C:** -40

**Autoflammability°C:** >230

**10. STABILITY AND REACTIVITY**

**Stability:** Stable under normal conditions.

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

**Materials to avoid:** Oxidising agents.

**11. TOXICOLOGICAL INFORMATION**

**Hazardous ingredients:** XYLENE

ORL MUS LD50 2119 mg/kg

ORL RAT LD50 4300 mg/kg

SCU RAT LD50 1700 mg/kg

- 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

**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. Bitumen has a recommended Category 3 carcinogen classification due to the presence of polycyclic aromatic hydrocarbons; breathing in these compounds may give rise to long term health effects.

**12. ECOLOGICAL INFORMATION**

**Mobility:** Insoluble in water.

**Other adverse effects:** The aerosol contents are potentially harmful 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:** 1950

**ADR Class:** 2

**Classification code:** 5F

**Shipping name:** AEROSOLS

**Labelling:** 2.1

**IMDG / IMO**

**UN no:** 1950

**Class:** 2

**EmS:** F-D,S-U

**Marine pollutant:** .

**Labelling:** 2.1

**IATA / ICAO**

**UN no:** 1950

**Class:** 2

**Labelling:** 2.1

**15. REGULATORY INFORMATION**

**Hazard symbols:** Extremely flammable.

Harmful.



**Risk phrases:** R12: Extremely flammable.

R20/21: Harmful by inhalation and in contact with skin.

R40: Limited evidence of a carcinogenic effect.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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**Safety phrases:** S2: Keep out of the reach of children.  
S23: Do not breathe vapour/spray.  
S36/37: Wear suitable protective clothing and gloves.  
S51: Use only in well-ventilated areas.  
S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

**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 D and S under the 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:** R40: Limited evidence of a carcinogenic effect.  
R10: Flammable.  
R20/21: Harmful by inhalation and in contact with skin.  
R38: Irritating to skin.  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65: Harmful: may cause lung damage if swallowed.  
R66: Repeated exposure may cause skin dryness or cracking.  
R67: Vapours may cause drowsiness and dizziness.  
R11: Highly flammable.  
R36: Irritating to eyes.  
R12: Extremely flammable.

**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.