



MATERIAL SAFETY DATA SHEET

Issued: 1/6/2007

Revision No: 2

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

Product name: Stormsure

Use / description of product: Stormsure Flexible Repair Adhesive

Company name: Stormsure Ltd

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2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients: ETHYL ACETATE 10-30%

EINECS: 205-500-4 CAS: 141-78-6

[F] R11; [Xi] R36; [Xi] R66; [-] R67

• DIPHENYLMETHANE DIISOCYANATE (ISOMERS AND HOMOLOGUES) 10-30%

CAS: 9016-87-9

[Xn] R20; [Xi] R36/37/38; [Sens.] R42

3. HAZARDS IDENTIFICATION

Main hazards: Irritating to eyes. May cause sensitisation by inhalation. Repeated exposure may cause skin dryness or cracking. 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. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Onset of symptoms may be delayed

5. FIRST AID MEASURES (ACTION)

Skin contact:

Eye contact:

Remove all contaminated clothes and footwear immediately unless stuck to skin.

Remove from skin with paper or towel. Wash effected area thoroughly with soap and water. Seek medical advice if symptoms persist.

Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

6. FIRE-FIGHTING MEASURES

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

Use water spray to cool containers.

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

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

7. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. 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. Eliminate all sources of ignition.

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. Do not use equipment in clean-up procedure which may produce sparks.

8. HANDLING AND STORAGE

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air. Smoking is forbidden. Use non-sparking tools.

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

TWA (8 hr exposure limit): 0.02mg/m³ (MEL)

STEL (15 min exposure limit): 0.07mg/m³ (MEL)

Hazardous ingredients: ETHYL ACETATE

TWA (8 hr exposure limit): 200 ppm STEL (15 min exposure limit): 400 ppm (OES)

• DIPHENYLMETHANE DIISOCYANATE (ISOMERS AND HOMOLOGUES)

TWA (8 hr exposure limit): 0.02 mg/m³ STEL (15 min exposure limit): 0.07 mg/m³ (OES)

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

Respiratory protection: If exposure levels are likely to be exceeded, use a face mask fitted with an AXP3 filter for short term low level exposures, or for long term/ high level exposures a positive pressure air fed mask should be used.

Hand protection: Impermeable gloves. Butyl gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Impermeable protective clothing.

10. PHYSICAL AND CHEMICAL PROPERTIES

State: Liquid

Colour: Colourless

Odour: Characteristic odour

Evaporation rate: Fast

Oxidising: Non-oxidising (by EC criteria)

Viscosity: Viscous

Boiling point/range°C: 76

Flammability limits %: lower: 2.1

upper: 11.5

Flash point°C: -4

Autoflammability°C: 460

Relative density: 1.05

11. STABILITY AND REACTIVITY

Stability: Stable under normal conditions. Stable at room temperature.

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

Materials to avoid: Strong oxidising agents. Strong acids.

Haz. decomp. products: In combustion emits toxic fumes.

12. TOXICOLOGICAL INFORMATION

Hazardous ingredients: ETHYL ACETATE

ORL MUS LD50 4100 mg/kg

ORL RAT LD50 5620 mg/kg

SCU RAT LDLO 5 gm/kg

• DIPHENYLMETHANE DIISOCYANATE (ISOMERS AND HOMOLOGUES)

ORL RAT LD50 49 gm/kg

SKN RBT LD50 >9400 mg/kg

Routes of exposure: Refer to section 4 of MSDS for routes of exposure and corresponding symptoms.

13. ECOLOGICAL INFORMATION

Mobility: Volatile.

Persistence and degradability: Biodegradable in part only.

Bioaccumulative potential: No data available.

14. DISPOSAL CONSIDERATIONS

Disposal operations: Arrange for disposal by a licenced waste disposal company

Disposal of packaging: Arrange for disposal by a licenced waste disposal company

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

15. TRANSPORT INFORMATION

ADR / RID

UN no: 1133 ADR Class: 3

Packing group: II Classification code: F1

Shipping name: ADHESIVES

Labelling: 3 Hazard ID no: 33

IMDG / IMO

UN no: 1133 Class: 3

Packing group: II EmS: F-E,S-D

Marine pollutant: . Labelling: 3

IATA / ICAO

UN no: 1133 Class: 3

Packing group: II Packing instructions: 305(P&CA); 307(CAO)

Labelling: 3

16. REGULATORY INFORMATION

Hazard symbols:

Highly flammable.

Harmful.

Risk phrases:

Safety phrases:

R36: Irritating to eyes.

R42: May cause sensitisation by inhalation.

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapours may cause drowsiness and dizziness.

S2: Keep out of the reach of children.

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

S23: Do not breathe vapour.

S24/25: Avoid contact with skin and eyes.

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

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S63: In case of accident by inhalation, remove casualty to fresh air and keep at rest.

S29/35: Do not empty into drains; dispose of this material and its container in a safe way.

Precautionary phrases:

Contains isocyanates. See information supplied by the manufacturer.

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.

17. OTHER INFORMATION

Risk phrases used in s.2:

R11: Highly flammable.

R36: Irritating to eyes.

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapours may cause drowsiness and dizziness.

R20: Harmful by inhalation.

R36/37/38: Irritating to eyes, respiratory system and skin.

R42: May cause sensitisation by inhalation.

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.