

SAFETY DATA SHEET

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MERLIN

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Revision No: 2

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

Product name: MERLIN

Use / description of product: Expanding polyurethane filler.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient 1: DIPHENYLMETHANE DIISOCYANATE (ISOMERS AND HOMOLOGUES) 30-60%

CAS: 9016-87-9

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

Ingredient 2: DIMETHYL ETHER <10%

CAS: 115-10-6

EINECS: 204-065-8

[F+] R12;

Ingredient 3: BUTANE <10%

CAS: 106-97-8

EINECS: 203-448-7

[F+] R12;

Ingredient 4: PROPANE <10%

CAS: 74-98-6

EINECS: 200-827-9

[F+] R12;

3. HAZARDS IDENTIFICATION

Main hazards: Extremely flammable. Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitisation by inhalation.

4. FIRST AID MEASURES (SYMPTOMS)

Skin contact: There may be irritation and redness at the site of contact. This product bonds to skin extremely well. May stain the skin.

Eye contact: There may be irritation and redness. May bond to eye tissues.

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.

[cont...]

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4. FIRST AID MEASURES (ACTION)

- Skin contact:** Carefully remove cured product from skin, soften remaining material with moisturiser and allow to degrade naturally.
- 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. 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.
- Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.
- Clean-up procedures:** Absorb into dry earth or sand. If inside, transfer outside of building in suitable containers. Shovel any cured material into suitable containers for safe disposal. Wash the spillage site with large amounts of water.

7. HANDLING AND STORAGE

- Handling requirements:** Ensure there is sufficient ventilation of the area. Smoking is forbidden. Avoid direct contact with the substance.
- Storage conditions:** Store in cool, well ventilated area. Keep away from sources of ignition. Store in a cool, well ventilated area, below 50°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering measures:** Ensure there is sufficient ventilation of the area. Diphenylmethanediisocyanate -isomers & homologues MEL: 0.07mg/m³ (8h TWA); 0.02mg/m³ (15 min STEL).
- Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.
- Hand protection:** PVC or rubber gloves.
- Eye protection:** Safety goggles.
- Skin protection:** Protective clothing with elasticated cuffs and closed neck. Ensure safety shower is to hand.

9. PHYSICAL AND CHEMICAL PROPERTIES

- State:** Aerosol
- Colour:** Off-white
- Odour:** Musty (mouldy).
- Oxidising:** Non-oxidising (by EC criteria)

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Solubility in water: Insoluble

Flammability limits %: lower: 0.8

upper: 18.6

Flash point°C: -40

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

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

Materials to avoid: None.

Haz. decomp. products: Fire creates toxic gases/vapours/fumes of ammonia or amines, carbon monoxide, oxides of nitrogen, hydrogen cyanide.

11. TOXICOLOGICAL INFORMATION

Effects of exposure This product has low toxicity. Only large volumes may have adverse effect on human health. No specific acute or chronic health impact noted, but this chemical may still have adverse impact on human health, either in general or on certain individuals with pre-existing or latent health problems.

Routes of exposure Inhalation. Ingestion. Skin. Eyes.

Ingredient 1: DIPHENYLMETHANE DIISOCYANATE (ISOMERS AND HOMOLOGUES)
ORL RAT LD50 49g/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity: MERLIN
DAPHNIA 48H EC50 >1000mg/l

Other adverse effects: Negligible ecotoxicity.

13. DISPOSAL CONSIDERATIONS

Waste disposal: Arrange for collection by specialised disposal company.

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

Labelling: 2

Shipping name: AEROSOLS

IMDG / IMO

UN no: 1950

Class: 2

EmS: 2-13

Marine pollutant: .

Labelling: 2

MERLIN

IATA / ICAO

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

15. REGULATORY INFORMATION

Hazard symbols: Extremely flammable.
Harmful.**Risk phrases:** R12: Extremely flammable.
R20: Harmful by inhalation.
R36/37/38: Irritating to eyes, respiratory system and skin.
R42: May cause sensitisation by inhalation.**Safety phrases:** S2: Keep out of the reach of children.
S13: Keep away from food, drink and animal feeding stuffs.
S16: Keep away from sources of ignition - No smoking.
S23: Do not breathe gas/fumes/vapour/spray.
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.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.**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. ADDITIONAL INFORMATION

Additional information: "Contains isocyanates" should be noted on the label. This product belongs to hazard Groups E and S under the COSHH Essentials guidelines (Publication HSG193). Always use in accordance with manufacturer's directions. Caution: Pressurised container; do not puncture or burn even when empty.**Risk phrases used in s.2:** R20: Harmful by inhalation.
R36/37/38: Irritating to eyes, respiratory system and skin.
R42: May cause sensitisation by inhalation.
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.