

Ref: HSD/U5
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UNIVERSAL SEALANTS (UK) LIMITED

NUFINS DIVISION

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1. Product Identification

Trade Name: UNISEAL 150 / UNISEAL 170

Description: One part polyurethane sealant.

2. Composition / Information on Ingredients

Ingredient	CAS Number	Conc. (w/w)	Classification	R. Phrases
4,4'-Diphenylmethane di-isocyanate (mixture)	9016-87-9	<1%	Xn	20,36/37/38,42

3. Hazard Identification

Contains trace quantities of isocyanate (<1%). Can cause sensitisation by inhalation. Presents no serious risks for the environment.

4. First Aid Measures

Inhalation: In case of drowsiness or sickness remove to fresh air, keep patient warm and at rest. If unconscious, turn to the recovery position. Seek medical assistance.

Skin Contact: NOTE: Effects may be delayed. Promptly remove contaminated clothing and wash the affected area with plenty of soap and water to ensure all traces of product are removed, then rinse thoroughly. Any contaminated clothing must be thoroughly cleaned before re-using. Seek medical advice if irritation persists.

Eye Contact: Flush with copious amounts of clean water for at least 15 minutes, with the eye lids held open. Seek medical attention.

Ingestion: Induce vomiting. Wash out mouth with water. Keep patient at rest and obtain medical attention.

5. Fire Fighting Measures

Suitable Extinguisher Media: Polar solvent foam, dry powder, carbon dioxide anhydride.

Unsuitable Extinguishing Media: Pressurised water fire extinguisher.

Exposure Hazards: May give off toxic fumes if heated or involved in a fire, including carbon dioxide, carbon monoxide and hydrogen cyanide.

Special Protective Equipment: Full face, positive pressure, self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

- Personal Precautions:** Wear protective equipment as specified in Section 8. Do not eat, drink or smoke. Avoid contact with skin and eyes.
- Environmental Precautions:** Presents no danger for the environment once polymerised.
- Spillages:** Scrape off mastic after it has polymerised. Send for incineration according to appropriate regulations.

7. Handling and Storage

- Handling:** No specific precautions required when handling unopened containers; follow any relevant manual handling guidance. Avoid contact with water, alcohols, amines and other materials that may react with isocyanates. Refer to Sections 6 and 8 if exposure to product is possible. Wash thoroughly with soap and water before eating, drinking or smoking, and after work.
- Storage:** Store in original containers in a well ventilated area away from heat (<30°C), ignition sources or open flame. Do not store near acids. Isocyanates react with water to liberate carbon dioxide. Any ingress of moisture into an isocyanate container, whether full or empty, can lead to a pressure build-up and subsequent explosion.

8. Exposure Controls / Personal Protection

- Occupational Exposure Standards:** Isocyanates (as -NCO)
8 Hour TWA 0.02mg/m³, 15 min STEL 0.07mg/m³
MEL (Sens).
These exposure limits must not be exceeded at any time during the exposure period.
- Engineering Control Measures:** Refer to any applicable COSHH assessments. Engineering controls should be used where practicable in preference to personal protection and may include physical containment and good ventilation.
- Respiratory protection:** If levels of isocyanate exceed the above limits use an approved respirator fitted with an appropriate gas cartridge (organic substance). All items must conform to EN149 and should be suitable for the levels of contamination present in the workplace.
- Hand Protection:** Wear Neoprene or Nitrile gloves or gauntlets. These must be manufactured to EN374. The material breakthrough time should be stated by the glove manufacturer, and must be observed at all times.
- Eye Protection:** Chemical resistant goggles conforming to BS 2092 should be worn.

Body Protection: Wear suitable impervious, chemical resistant overalls.

Foot Protection: Wear chemical resistant safety footwear.

Hygiene Measures: Avoid smoking, eating and drinking when handling.

9. Physical and Chemical Properties

Appearance:	Coloured thixotropic paste	Boiling Point:	N/D
Odour:	Hydrocarbon	Vapour Pressure @ 20°C:	~10mbar
pH:	N/D	Evaporation Rate (Butyl Acetate = 1):	N/A
Flash Point:	N/A	Flammable Limits in Air:	Upper: N/D Lower: N/D
Solubility:	Insoluble in water (reacts)	Autoignition Temperature:	N/D
Flammability:	Not Flammable		
Specific Gravity:	1.33		

10. Stability and Reactivity

Stability: Stable under normal conditions (see Section 7).

Materials to Avoid: Alcohols, glycols, acids (organic and inorganic), oxidising agents, amines, water, steam, inorganic alkalis.

Hazardous Decomposition Products: Toxic gases/vapours/fumes of: Carbon dioxide(CO₂). Carbon monoxide (CO). Oxides of: Nitrogen. Hydrogen cyanide (HCN). Nitrous gases (NO_x).

11. Toxicological Information

Acute Toxicity:

Inhalation:	To our knowledge no serious effect.
Skin Contact:	To our knowledge no serious effect.
Ingestion:	To our knowledge no serious effect.

Local Reaction:

Inhalation:	Can cause sensitisation when inhaled.
Skin Contact:	To our knowledge no serious effect.
Eye Contact:	Conjunctivitis.

Sensitisation:

Inhalation:	Can cause sensitisation when inhaled.
Skin Contact:	Not sensitising to the best of our knowledge.

Health Warnings: Can be hazardous when inhaled. May cause allergic reaction and irritation of the respiratory system. Prolonged inhalation of high concentrations may damage the respiratory system. Pulmonary sensitiser and severe pulmonary irritant. Recognised allergen.

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12. Ecological Information

Persistence:

In Soil: None.
In Water: Insoluble.

Bioaccumulation: None.

Ecotoxicological Effects: Not toxic for the environment.

13. Disposal Considerations

Excess Substance or Waste: Solid mass can be incinerated.

Elimination Method: Incineration according to appropriate regulations.

Contaminated Packaging: Aluminium packaging may be recycled.

Elimination Method: According to appropriate regulations.

14. Transport Information

Not classified as hazardous for transport.

15. Regulatory Information

EU Classification and Labelling Particulars:

Designated Name: UNISEAL 150 / UNISEAL 170

Classification: Harmful

Indication(s) of Danger: Xn

Contains: Contains isocyanates - see information supplied by the manufacturer.

Risk and Safety Phrases:

R42: May cause sensitisation by inhalation.
S23: Do not breathe fumes / vapour.
S36/37: Wear suitable protective clothing and gloves.
S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).

UK Guidance Publications: EH40; Occupational Exposure Limits, HSE. Revised annually.
EH26; Occupational Skin Diseases - Health and Safety Precautions, HSE.

UK Legislation: Health and Safety at Work, etc Act, 1974, and relevant Statutory Provisions.
Control of Substances Hazardous to Health Regulations, 1999.
The Manual Handling Operations Regulations, 1992.
The Personal Protective Equipment at Work Regulations, 1992.
Chemicals (Hazard Information and Packaging for Supply) Regulations, 2002 - CHIP 3.

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16. **Other Information**

Full Text of R-Phrases Referred to above:

R20: Harmful by inhalation.
R36/37/38: Irritating to eyes, respiratory system and skin.
R42: May cause sensitisation by inhalation.

Training Advice: Do not use unless trained to do so. Refer to the Technical Data Sheet for the product.

Recommended Uses: For professional use only. These products are designed for use as general-purpose single pack polyurethane for sealing of contraction and expansion joints.

Further Information: This Safety Data Sheet was compiled in accordance with EU Directives 67/548/EEC and 1999/45/EC. Reference was also made to the above legislation and guidance publications.

MSDS First Issued: 10th November 1996

MSDS Revised: 13th February 2004

Changes in this Version: All sections revised to comply with CHIP 3 provisions.

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Disclaimer: The information in this document is offered for general health and safety guidance only and is not intended to be a definitive source of advice, nor does it constitute a risk assessment, for which the user is responsible. All information provided in this document is believed to be accurate to the best of our knowledge. Users of the products referred to should observe the recommendations, conditions and instructions relating to any relevant product label, usage information, consent or approval in force at the time. Further and more specific information may be obtained from the supplier on request.