



RESIN SURFACES LIMITED

SAFETY DATA SHEET, RESUJOINT

1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY:

NAME OF PRODUCT: RESUJOINT 2-pack polyurethane jointing material.

MANUFACTURERS: Resin Surfaces Ltd, Titan House, Lowick Close, Newby Road Industrial Estate, Hazel Grove, Cheshire, SK7 5ED, England.

EMERGENCY TELEPHONE: 0161-483-1232.

2: COMPOSITION/INFORMATION ON INGREDIENTS:

A 2-pack system comprising base and hardener which are supplied in separate containers to be mixed together at the site of application.

	% by weight	CAS No.	Hazard Symbols	R-phrases
Composition of base:				
Polyether/polyester polyol resin	50-70%			
Castor oil	2-5%	none	none	none
Non-toxic pigments & additives	30-50%			
Composition of hardener:				
4-4'-diphenylmethane-diisocyanate	approx. 100%	26447-40-5	Xn	R20,36/37/38,42/43

3: HAZARDS IDENTIFICATION:

Base: Non-hazardous.
Hardener : Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitisation by inhalation and skin contact

4: FIRST AID MEASURES: (Applicable to both base and hardener)

Eye contact: Rinse carefully and thoroughly with water and seek medical attention.
Skin contact: Wipe off mechanically and wash with plenty of soap and water. Remove contaminated clothing.
Inhalation: Remove the affected person to fresh air and allow to rest. In case of irritation of the respiratory tract, consult a doctor. Ingestion: In case of swallowing, consult a doctor.

5: FIRE FIGHTING MEASURES:

Special hazards: If involved in a fire, may generate noxious or toxic vapours. Formation of carbon monoxide, nitrogen oxide, isocyanate vapour and traces of hydrogen cyanide is possible.
Protective equipment: Fire fighters wear self contained breathing apparatus.
Extinguishing agents: Foam, dry powder, CO2 or waterspray.

6: ACCIDENTAL RELEASE MEASURES:

Personal precautions: Wear full protective clothing when dealing with a spillage.
Environmental precautions: Prevent from entering sewer system, surface water, or soil.
Methods for cleaning up: Absorb with earth, sand or other absorbent materials.

7: HANDLING AND STORAGE:

Handling: Wear goggles or a face shield, impervious gloves and protective clothing.
Storage: Store in a cool, well ventilated place away from foodstuffs. Keep containers dry and tightly sealed until mixing.

8: EXPOSURE CONTROLS/PERSONAL PROTECTION:

During mixing: Wear dust respirator when handling aggregate.
During application: Wear glasses, goggles or a face shield, impervious gloves and protective clothing. Apply in a well ventilated area. In cases of insufficient ventilation, suitable respiratory protection should be used, particularly when in confined spaces or where aerosols may be formed.

Component with work place control parameters
101-68-8 diphenyl methane -4,4-diisocyanate (MDI) twa 0.02mg/m³ stel 0.07 mg/m³

9: PHYSICAL AND CHEMICAL PROPERTIES:

Base: Physical state: pigment dispersion in liquid resin.
Colour: varies according to shade of finish required.
Odour: none.
Vapour pressure: <0.01 kPa at 20 °C.
Boiling point: >150 °C.
Flash point: 230 °C.
Density: about 1.4 g/cm³ at 20 °C.
Solubility: immiscible with water.
Viscosity: >10 Pa.s at 25 °C.

Hardener: Physical state: liquid.
Colour: dark amber / brown.
Odour: musty.
Vapour pressure: <0.000001 kPa at 20 °C. 4-4'-diphenylmethanediisocyanate
Boiling point: thermal decomposition above 260 °C.
Flash point: >200 °C.
Density: about 1.2 g/cm³ at 20 °C.
Solubility: immiscible with water.
Viscosity: <1 Pa.s at 25 °C.

10: STABILITY AND REACTIVITY:

Base: No hazardous decomposition products when stored and handled correctly.
Hardener: Reacts exothermally with amines and alcohols. Reacts with water forming carbon dioxide.

11: TOXICOLOGICAL INFORMATION:

Base: LD50 oral, rat: >5000 mg/kg.
Hardener: LD50 oral, rat: >15000 mg/kg.
Contains isocyanates. See information supplied by the manufacturer.
Harmful by inhalation and in contact with the skin.
Irritant to skin, eyes, nose, throat, and respiratory tract. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. Hypersensitive persons may suffer from these effects even at low concentrations.

12: ECOLOGICAL INFORMATION: (Applicable to both base and hardener)

Environmental precautions: Prevent from entering sewer system, surface water, or soil.
The hardener reacts with water forming insoluble polyurea. This reaction is accelerated by detergents and water soluble solvents.

13: DISPOSAL CONSIDERATIONS: (Applicable to both base and hardener)

Waste: The UK environmental protection (Duty of Care) regulations and amendments should be considered. Special waste regulations may apply to the disposal of waste (properties H4 and H5)
Contaminated packaging should be emptied as far as possible before disposal. Do not reuse packaging.

14: TRANSPORT INFORMATION:

Base: Not classed as dangerous or restricted goods within the meaning of national and international transport regulations.

Hardener: Not dangerous cargo. Irritating to skin and mucous membranes. Avoid temperatures above 50 deg.C and below 0 deg.C. Keep dry. Keep away from foodstuffs. Keep away from acids and alkalis.

15: REGULATORY INFORMATION:

Base: Hazard labels: none.
R-phrases: none.
S-phrases: none.

Hardener: Hazard labels: Xn Harmful. Contains isocyanates, see manufacturers information
diphenylmethane-4-4'-diisocyanate.

R-phrases: R20 Harmful by inhalation.
R36/37/38 Irritating to eyes, respiratory system and skin.
R42/43 May cause sensitisation by inhalation and skin contact.

S-phrases: S23.3 Do not breathe vapour / spray
S36/3739 Wear suitable protective clothing, gloves, and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical attention immediately (show the label where possible).
Maximum exposure limit: 0.02 mg/cm³ (8 hour average value) 0.07 mg/cm³ (15 minute average value)

16: OTHER INFORMATION:

The base and hardener are mixed together in the approximate ratio as follows:

base: 80-95% by weight
hardener: 5-20% by weight

All the foregoing information should be regarded as being applicable to the finished paint as well as to the individual base and hardener components.
