



RESIN SURFACES LIMITED

## SAFETY DATA SHEET, RESUDECK AND RESUDECK E35

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

**NAME OF PRODUCT:** RESUDECK 2-pack polyurethane high build floor coating.

**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:				
Polyester polyol resin	50-70%			
Castor oil	2-5%	none	none	none
Non-toxic pigments & Additives	20-40%			
Composition of hardener:				
4-4'-diphenylmethane-diisocyanate	approx. 100%	9016-87-9Xn		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 immediate 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.  
Note: symptoms may appear later .

### 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 are possible.

Protective equipment: Fire fighters wear self contained breathing apparatus.

Extinguishing agents: Foam, dry powder, CO2 or water spray.  
Where possible prevent extinguishing media from entering the drains etc.

**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.

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**7: HANDLING AND STORAGE:**

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

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**8: EXPOSURE CONTROLS/PERSONAL PROTECTION:**

During application: Wear goggles or a face shield, impervious gloves and protective clothing. Respiratory protection is required in insufficiently ventilated working areas and during spraying.  
Open Hardener containers with care.  
In cases of hypersensitivity of the respiratory tract, (asthmatic and bronchial conditions) it is inadvisable to work with this product  
Keep away from food drink and tobacco, wash hands before breaks and at the end of work. Keep working clothes separate and remove all contaminated clothes immediately. Ensure all contaminated clothes are properly laundered prior to reuse.

Component with work place control parameters  
101-68-8 diphenyl methane -4,4-diisocyanate (MDI) twa 0.02mg/m<sup>3</sup> stel 0.07 mg/m<sup>3</sup>

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**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 1.3 g/cm<sup>3</sup> at 20 °C.  
Solubility: immiscible with water.  
Viscosity: <1 Pa.s at 25 °C.

Hardener: Physical state: liquid.  
Colour: dark amber/ brown.  
Odour: musty.  
Vapour pressure: <0.000001 kPa at 20 deg.C. 4-4'-diphenylmethane-diisocyanate  
Boiling point: thermal decomposition above 260 deg.C.  
Flash point: 200 °C.  
Density: about 1.2 g/cm<sup>3</sup> at 20 °C.  
Solubility: immiscible with water.  
Viscosity: <1 Pa.s at 25 °C.

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**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.  
The prolonged storage of these materials in damp conditions may result in a reaction with water vapour leading to pressurization of the containers.

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**11: TOXICOLOGICAL INFORMATION:**

Base: LD50 oral, rat: >5000 mg/kg.

Hardener: LD50 oral, rat: >10000 mg/kg. Severe respiratory irritant by inhalation, and potential respiratory sensitizer. Hypersensitive persons may suffer from broncho constrictions (asthmatic symptoms) at very low concentrations. Moderate to severe irritant by skin contact. Prolonged and/or repeated contact may lead to skin sensitisation. May cause eye irritation and reversible corneal injury.

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**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.

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**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.

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**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 °C. and below 0 °C.  
Keep dry. Keep away from foodstuffs. Keep away from acids and alkalis.

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**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).

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**16: OTHER INFORMATION:**

Mixing ratios are product dependant.  
The base and hardener are mixed together in the approximate ratio as follows:  
base: 60-90% by weight  
hardener: 10-40% by weight

A decontamination solution can be prepared from water isopropanol and ammonia. This solution can be used for the cleaning off of hard surfaces only, and is not suitable for skin or living tissue. All the foregoing information should be regarded as being applicable to the finished product as well as to the individual base and hardener components.