

## 1. Identification

**Name of Substance or Preparation:** **Polyurethane Rubber Series Part B**

**Unique Reference Number:** Polyurethane Rubber Series Part B

**Supplier:** DWR plastics

Broadway

Newport

Shropshire

TF10 7TP

**Email:** info@dwrplastics.com

**Telephone:** +44 (0)7576028547

## 2. Composition and Ingredients

<b>Substance?</b>	No	<b>Substance Name:</b>	N/A
<b>CAS Number:</b>	N/A	<b>EC Index Number:</b>	N/A
<b>EEC Number:</b>	N/A		

Components Contributing to Hazard Classification	% by Wt.	CAS No.	Hazard	Risk phrases
Diphenylmethane 4,4-diisocyanate (MDI), isomers and homologues	>60%	009016-87-9	Harmful	R20 - Harmful by inhalation R36/37/38 - Irritating to eyes, respiratory system, and skin. R40: Limited evidence of a carcinogenic effect. R42/43 - May cause sensitisation by inhalation & skin contact. R48/20: Danger of serious damage to health by prolonged exposure.

## 3. Hazards Identification

**CHIP Classification:** HARMFUL

**Risk Phrases:** R20 Harmful by inhalation  
R36/37/38 Irritating to eyes, respiratory system, and skin.  
R40 Limited evidence of a carcinogenic effect.  
R42/43 May cause sensitisation by inhalation & skin contact.  
R48/20 Danger of serious damage to health by prolonged exposure.

**Other Information:** Vapour hazard is low at room temperature. If heated or sprayed high concentrations can be attained that could be hazardous on single exposure and may cause irritation of upper respiratory tract and lungs. Exposure to vapour may cause sensitisation in susceptible individuals. Contact with eyes may cause irritation with corneal injury. Prolonged or repeated skin contact may cause irritation. Oral LD<sub>50</sub> is low however ingestion may cause severe burns of mouth and throat.

## 4. First Aid Measures

**Immediate medical attention required?** Yes

**Professional assistance from physician required?** Yes

**Inhalation:** Remove to fresh air and allow to rest. If not breathing give artificial respiration. Obtain medical attention and keep under observation for up to 48 hours as effects can be delayed.

**Skin Contact:** Wash contaminated area with soap and water. Use skin cream to prevent dryness. Launder contaminated clothing.

**Eye Contact:** Flush immediately with water for 10-15 minutes prising eyelids open with fingers. Seek medical attention immediately.

**Ingestion:** Do not induce vomiting and give nothing by mouth. Seek medical attention.

## 5. Fire Fighting Measures

### Extinguishing Media

**Suitable:** Foam, dry chemical, CO<sub>2</sub>, water mist. in large quantities

**Not to be used:** Small quantities of water.

**Other Comments:** Where large quantities are involved breathing apparatus should be used.

**Special Exposure Hazards:** May produce toxic vapours during combustion.

**Special Fire Fighting Procedures:** Evacuate downwind personnel.  
**Protective Equipment Required:** Positive pressure self-contained breathing apparatus should be used.

## 6. Accidental Release Measures

**Personal Precautions** Evacuate unnecessary personnel. Wear suitable protective clothing including positive pressure self-contained breathing apparatus  
**Environmental Precautions** Do not allow to enter drains or watercourses  
**Clean-Up Procedures** Supplies of suitable decontaminant should be readily available. Contact Europol for details if required. Cover spillage with solid decontaminant, sawdust, sand or earth and allow to react for 30 minutes minimum. Sweep into open drums and remove for further decontamination and disposal. Wash spillage area with water and test for isocyanate vapours before allowing personnel into the area.

## 7. Handling and Storage

**Handling** Do not allow to come into contact with water. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Use only in a well ventilated place with local exhaust ventilation where necessary to ensure that the OEL for MDI is not exceeded.  
**Storage** Contact with moisture liberates carbon dioxide gas, which can cause dangerous pressure build-up in closed containers. Store in a dry place at 15-25°C in tightly sealed original containers.

## 8. Exposure Controls

### Take Measures to Prevent:

Build up of vapours. Contact with water or atmospheric moisture. Inhalation of vapour. Contact with skin and eyes.

### Exposure Control Limits:

Isocyanates (all) - MEL: Long Term (8 hour) 0.02 mg/m<sup>3</sup>  
Short Term (15 min.) 0.07 mg/m<sup>3</sup>

### Respiratory Protection:

Vapour levels should be maintained below the control limits. Where necessary use suitable breathing equipment.

### Hand Protection:

Wear suitable gloves.

### Skin Protection:

Wear suitable protective clothing.

### Eye Protection:

Wear goggles or safety glasses. Locate eyewash bottle in immediate area of work.

## 9. Physical and Chemical Properties

<b>Appearance:</b>	Liquid	<b>Explosive Properties:</b>	N/A
<b>Colour:</b>	Pale amber	<b>Oxidising Properties:</b>	N/A
<b>pH:</b>	N/A	<b>Vapour Pressure:</b>	Very low
<b>Boiling Point:</b>	>200°C (decomposes)	<b>Relative Density:</b>	1.22
<b>Freezing Point:</b>	<5°C	<b>Solubility in Water:</b>	Insoluble, reacts with evolution of CO <sub>2</sub>
<b>Flashpoint:</b>	>200°C	<b>Other:</b>	-
<b>Flammability:</b>	Not flammable		
<b>Key:</b>	N/A - Not Applicable,		N/M - Not Measured

## 10. Stability and Reactivity

### Conditions to Avoid:

Excessive heat.

### Materials to Avoid:

Acids, alcohols, amines, bases, water, galvanised metals, copper and its alloys.

### Hazardous Decomposition Products:

Oxides of nitrogen and carbon, hydrogen cyanide, other hazardous gaseous products.

## 11. Toxicological Information

MDI

LD<sub>50</sub> oral, rat > 2000 mg/kg.

Single dose oral toxicity is considered to be low.

## Ecological Information

Reaction with water produces insoluble polyurea, which is estimated from static laboratory conditions to have a low level of biodegradation. This material is estimated to be practically non-toxic to fish, Daphnia and bacteria on a static acute basis.

## 12. Disposal Considerations

### Likely residues and waste products:

Small quantities of waste should be reacted with polyol to neutralise prior to disposal. Empty drums should be decontaminated and scrapped.

### Safe handling of residues and waste product:

Dispose of neutralised residues by controlled incineration or approved landfill in accordance with local authority regulations.

## 13. Transport Information

<b>Proper Shipping Name:</b>	DIPHENYLMETHANE-4,4-DIISOCYANATE
<b>UN No.:</b>	-
<b>ADR/VLG:</b>	-
<b>ADNR/VBG:</b>	-
<b>RID/VSG:</b>	-
<b>IMO/IMDG:</b>	-
<b>ICAO/IATA:</b>	-

This product is not classified as hazardous for transport.

## 14. Regulatory Information

### Supply Label Information:

HARMFUL

<b>Risk Phrases:</b>	R20	Harmful by inhalation
	R36/37/38	Irritating to eyes, respiratory system and skin
	R40	Limited evidence of a carcinogenic effect.
	R42/43	May cause sensitisation by inhalation & skin contact.
	R48/20	Danger of serious damage to health by prolonged exposure.
<b>Safety Phrases:</b>	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
	S28	After contact with skin, wash immediately with plenty of water and soap
	S38	In case of insufficient ventilation, wear suitable respiratory equipment
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show this label where possible).
<b>Other:</b>	Contains isocyanates - See information supplied by manufacturer.	

## 15. Other Information

### Training advice:

Please read all datasheets carefully. If any point remains unclear or if further training is required please contact Europol.

### Recommended uses and restrictions:

Isocyanate component for two-part polyurethane in conjunction with a polyol. No other use recommended.

### Further information sources:

Please refer to the Safety Data Sheet for accompanying polyol for further information.

**NOTE:** This SDS has been prepared from information we believe to be reliable, however it is provided without warranty, expressed or implied, as to its correctness. Since the conditions of handling, storage, use and disposal of this material are beyond our control we accept no responsibility whatsoever for any loss, damage or expense which results from the handling, storage, use or disposal of this material.