

## SAFETY DATA SHEET

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### RL171C/BK

Revision 5  
Revision date 31-Jan-2008

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

**Product name** RL171C/BK  
**Company** Robnor Resins Ltd  
Hunts Rise  
South Marston Park  
Swindon  
Wiltshire  
SN3 4TE  
support@robnor.co.uk  
www.robnor.co.uk  
**Telephone** +44 (0)1793 823741  
**Fax** +44 (0)1793 827033  
**Emergency telephone number** +44 07831 130543

#### 2 HAZARDS IDENTIFICATION.

**Main hazards** No Significant Hazard

#### 3 . COMPOSITION / INFORMATION ON INGREDIENTS.

#### 4. FIRST AID MEASURES

**Skin contact** Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.  
**Eye contact** Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.  
**Inhalation** Move the exposed person to fresh air. Seek medical attention.  
**Ingestion** If swallowed, seek medical advice immediately and show this container or label. Drink 1 to 2 glasses of water. Ingest 300ml of activated charcoal. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.  
**General information** If you feel unwell, seek medical advice (show the label where possible).

#### 5. FIRE FIGHTING MEASURES

**Extinguishing media** Carbon dioxide (CO2) Foam. Dry chemical. Water spray.  
**Fire hazards** Burning produces irritating, toxic and obnoxious fumes.  
**Protective equipment** Wear: Self-contained breathing apparatus.

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<b>Personal precautions</b>	Wear suitable protective equipment. Eliminate all sources of ignition. Keep personnel away from spill. Evacuate personnel to a safe area. Ensure adequate ventilation of the working area.
<b>Environmental precautions</b>	Do not let product contaminate subsoil. Do not allow product to enter drains.
<b>Clean up methods</b>	Remove mechanically; cover the remainder with wet, absorbent material (e.g. sawdust, chemical binder based on calcium silicate hydrate, sand). After approximately one hour transfer to waste container and do not seal (evolution of CO <sub>2</sub> !).

**7. HANDLING AND STORAGE**

<b>Handling</b>	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Do not eat, drink or smoke in areas where this product is used or stored.
<b>Storage</b>	Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Do not store with food, feedstuffs, fertilizers and other sensitive materials..

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>Engineering measures</b>	Ensure adequate ventilation of the working area.
<b>Occupational exposure controls</b>	Keep away from food, drink and animal feedingstuffs.
<b>Respiratory protection</b>	Wear suitable respiratory equipment when necessary. Suitable half mask respirator with filter P3 (EN 143)
<b>Hand protection</b>	Rubber gloves. Chemical resistant gloves (PVC)
<b>Eye protection</b>	Face shield. Approved safety goggles.
<b>Protective equipment</b>	Avoid contact with eyes and skin. Wash all contaminated clothing before reuse. Wear suitable protective equipment.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Description</b>	Liquid.
<b>Colour</b>	Black.
<b>Odour</b>	Slight.
<b>Boiling point</b>	300°C
<b>Flash point</b>	300°C
<b>Relative density</b>	1.73

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable under normal conditions.
<b>Conditions to avoid</b>	Heat, sparks and open flames.
<b>Materials to avoid</b>	Amines.
<b>Hazardous decomposition products</b>	Carbon oxides. Nitrogen oxides. Isocyanides. Hydrogen cyanide.

**11. TOXICOLOGICAL INFORMATION**

<b>Sensitization</b>	May cause sensitisation by skin contact.
<b>Repeated or prolonged exposure</b>	Avoid prolonged or repeated exposure.

**12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	No data is available on this product.
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**RL171C/BK**Revision 5  
Revision date 31-Jan-2008**13. DISPOSAL CONSIDERATIONS****General information** Can be incinerated if in compliance with local and national regulations.**14. TRANSPORT INFORMATION****Further information** The product is not classified as dangerous for carriage.**15. REGULATORY INFORMATION****Risk phrases** NSH - No Significant Hazard.**16. OTHER INFORMATION****General information** IT SHOULD BE NOTED THAT THIS PRODUCT IS INTENDED FOR USE WITH A HARDENER DESIGNATED BY ROBNOR RESINS LTD. THE CORRESPONDING SAFETY DATA FOR THAT HARDENER MUST BE STUDIED ALONG WITH THE DATA ON THIS SHEET PRIOR TO USE. USING HARDENERS WHICH HAVE NOT BEEN SUPPLIED AND/OR RECOMMENDED BY ROBNOR RESINS LTD FOR USE WITH THIS PRODUCT IS POTENTIALLY HAZARDOUS AND SHOULD NOT BE CONTEMPLATED.

Safety instructions and operating procedures for specified tasks must be written, communicated and enforced. These will include:

\*\*Provision of hazard information and training of personnel based on operating procedures and safety data sheets, together with instructions on how to avoid exposure.

\*\*Assessment of the risk of exposure and contact after all reasonable practical steps have been taken to avoid exposure, selection of suitable personal protective equipment and implementation of an appropriate programme.

\*\*Provision of facilities for washing, storage of clothing and skin care and promotion of their use.

\*\*Close supervision to identify failure in the performance of process controls or in following operating instructions, the occurrence of irritation and inadequate use of personal protective equipment. Assessment should also be made of the need for industrial personal hygiene and medical surveillance, and provision of appropriate services.

Occupational dermatitis contracted during exposure to resin systems is a reportable disease under Schedule 3 of the RIDDOR regulations (UK). Form F2508A available from the HSE should be used for such notification.

It is a statutory requirement that Medical Supervision is carried out when using products, which can cause an identifiable disease, there is reasonable likelihood that the disease may occur under the particular conditions of work and there are valid techniques for detecting indications of the disease.

The Safety Data Sheet was compiled using information gathered concerning its individual components. We know no synergistic effects but we cannot exclude the existence of such effects.

If this product is to be machined in any way then the toxicological information in Section 11 and the information concerning respiratory protection in Section 8 should be noted.

**Revision**

This document differs from the previous version in the following areas:

11 - sensitization.

11 - repeated or prolonged exposure.

12 - ecotoxicity.

## SAFETY DATA SHEET

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### HL171C/NC

Revision 4  
Revision date 28-Nov-2005

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

**Product name** HL171C/NC  
**Company** Robnor Resins Ltd  
Hunts Rise  
South Marston Park  
Swindon  
Wiltshire  
SN3 4TE  
support@robnor.co.uk  
www.robnor.co.uk  
**Telephone** +44 (0)1793 823741  
**Fax** +44 (0)1793 827033  
**Emergency telephone number** +44 07831 130543

#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

##### Hazardous ingredients

	Conc.	CAS	EINECS	Symbols/Risk phrases
Diphenylmethane diisocyanate, isomers and homologues	20 - 30%	9016-87-9		Xn;R20 Xi;R36 Xi;R37 Xi;R38 Xn;R42 Xi;R43

#### 3. HAZARDS IDENTIFICATION

**Main hazards** Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitisation by inhalation and skin contact.

#### 4. FIRST AID MEASURES

**Skin contact** Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.

**Eye contact** Rinse immediately with plenty of water for 15 minutes holding the eyelids open.

**Inhalation** Move the exposed person to fresh air. Seek medical attention. If breathing stops, provide artificial respiration.

**Ingestion** If swallowed, seek medical advice immediately and show this container or label. Drink 1 to 2 glasses of water. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.

**General information** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

#### 5. FIRE FIGHTING MEASURES

**Extinguishing media** Dry chemical. Sand. Alcohol resistant foam. Carbon dioxide (CO2)  
Do NOT use ... Water jet.

**Fire hazards** highly toxic or corrosive fumes may be formed in fire conditions.

**Protective equipment** Wear: Self-contained breathing apparatus.

## HL171C/NC

Revision 4  
Revision date 28-Nov-2005**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions</b>	Wear suitable protective equipment. Evacuate personnel to a safe area. Ensure adequate ventilation of the working area. Surfaces contaminated with the product will become slippery.
<b>Environmental precautions</b>	Do not let product contaminate subsoil. Do not allow product to enter drains. Prevent further spillage if safe. Do not flush into surface water.
<b>Clean up methods</b>	Absorb with inert, absorbent material. Clean spillage area thoroughly with plenty of water.

**7. HANDLING AND STORAGE**

<b>Handling</b>	Avoid contact with eyes and skin. Do not breathe gas/fumes/vapour/spray. Do not eat, drink or smoke in areas where this product is used or stored. Open container carefully. Avoid sparks, flames, heat and sources of ignition. Ensure adequate ventilation of the working area. Wear suitable protective equipment. Take precautionary measures against static discharges.
<b>Storage</b>	Store at temperatures between 15 °C and 25 °C. Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Do not store with acids.
<b>Suitable packaging</b>	Stainless steel containers. Mild steel containers.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure limits**

Diphenylmethane diisocyanate, isomers and homologues

WEL 8-hr limit ppm:  
WEL 15 min limit ppm:WEL 8-hr limit mg/m<sup>3</sup>: 0.02  
WEL 15 min limit mg/m<sup>3</sup>: 0.07

<b>Engineering measures</b>	Ensure adequate ventilation of the working area.
<b>Respiratory protection</b>	Wear: Suitable respiratory equipment.
<b>Hand protection</b>	Chemical resistant gloves (plastic)
<b>Eye protection</b>	Face shield. Safety glasses. Approved safety goggles.
<b>Protective equipment</b>	Avoid contact with eyes and skin. Adopt best Manual Handling considerations when handling, carrying and dispensing. Wash all contaminated clothing before reuse. Apron (Plastic or rubber)

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Description</b>	Liquid.
<b>Colour</b>	Brown.
<b>Odour</b>	Characteristic.
<b>Flash point</b>	200°C
<b>Vapour pressure</b>	0.000004(MDI) at 20°C mm Hg
<b>Relative density</b>	1.24

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable under normal conditions.
<b>Conditions to avoid</b>	Heat, sparks and open flames. Contact with strong acids will produce an exothermic reaction.
<b>Materials to avoid</b>	Acids. Oxidising agents. Bases.
<b>Hazardous decomposition products</b>	Carbon oxides. Isocyanides. Ammonia. Hydrogen cyanide. Nitrogen oxides.

## HL171C/NC

Revision 4  
Revision date 28-Nov-2005**11. TOXICOLOGICAL INFORMATION**

<b>Acute toxicity</b>	Harmful by inhalation, in contact with skin and if swallowed. Asthma sufferers should not work with isocyanates. May cause dizziness and headache.
<b>Corrosivity</b>	Irritating to respiratory system and skin. May cause irritation to skin, eyes and mucous membranes. Causes burns.
<b>Sensitization</b>	May cause sensitisation by inhalation and skin contact.
<b>Repeated or prolonged exposure</b>	Repeated or prolonged exposure may cause asthma and eczema.

**12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	Acute daphnia toxicity: EC50=1000mg/l 24H.
<b>Degradability</b>	Not readily biodegradable.


**13. DISPOSAL CONSIDERATIONS**

<b>General information</b>	Can be incinerated if in compliance with local and national regulations. Dispose of in compliance with all local and national regulations.
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**14. TRANSPORT INFORMATION**

<b>Further information</b>	The product is not classified as dangerous for carriage.
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**15. REGULATORY INFORMATION**

<b>Symbols</b>	Xn - Harmful 
<b>Risk phrases</b>	R20 - Harmful by inhalation. R36/37/38 - Irritating to eyes, respiratory system and skin. R42/43 - May cause sensitisation by inhalation and skin contact.
<b>Safety phrases</b>	S22 - Do not breathe dust. S23 - Do not breathe gas/fumes/vapour/spray. S24 - Avoid contact with skin. S37 - Wear suitable gloves. S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S63 - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

## HL171C/NC

Revision 4  
Revision date 28-Nov-2005**16. OTHER INFORMATION****Text of risk phrases in Section 2**

R20 - Harmful by inhalation.  
 R36 - Irritating to eyes.  
 R37 - Irritating to respiratory system.  
 R38 - Irritating to skin.  
 R42 - May cause sensitisation by inhalation.  
 R43 - May cause sensitisation by skin contact.

**General information**

IT SHOULD BE NOTED THAT THIS PRODUCT IS INTENDED FOR USE WITH A RESIN DESIGNATED BY ROBNOR RESINS. THE CORRESPONDING SAFETY DATA FOR THAT RESIN MUST BE STUDIED ALONG WITH THE DATA ON THIS SHEET PRIOR TO USE. USING RESINS WHICH HAVE NOT BEEN SUPPLIED AND/OR RECOMMENDED BY ROBNOR RESINS FOR USE WITH THIS PRODUCT IS POTENTIALLY HAZARDOUS AND SHOULD NOT BE CONTEMPLATED.

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