

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Page 1/6

Resin 3175 B

Revision 0

Revision date 2012-04-23

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Resin 3175 B
--------------	--------------

1.3. Details of the supplier of the safety data sheet

Company	Renishaw plc
Address	Whitebridge Way, Whitebridge Park, Stone, Staffordshire ST15 8LQ United Kingdom
Web	www.renishaw.com
Telephone	+44 (0)1785 815651
Fax	+44 (0)1785 812115
Email	msds@renishaw.com
Email address of the competent person	msds@renishaw.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification - 1999/45/EC	Xn; R20-40-42/43-48/20 Xi; R36/37/38 Symbols: Xn: Harmful.
Main hazards	Harmful by inhalation. Irritating to eyes, respiratory system and skin. Limited evidence of a carcinogenic effect. May cause sensitisation by inhalation and skin contact. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

2.2. Label elements

Symbols	Xn: 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 and skin contact. R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Safety phrases	S22 - Do not breathe dust. S23 - Do not breathe gas/fumes/vapour/spray. S24 - Avoid contact with skin. 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). S63 - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Resin 3175 B

Revision 0

Revision date 2012-04-23

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Methylenediphenyl diisocyanate	615-005-00-9	26447-40-5	247-714-0		40 - 50%	Carc. Cat. 3; R40 Xn; R20-48/20 Xi; R36/37/38 R42/43
4,4'-Methylenediphenyl diisocyanate	615-005-00-9	101-68-8	202-966-0		30 - 40%	Carc. Cat. 3; R40 Xn; R20-48/20 Xi; R36/37/38 R42/43
Triethyl phosphate	015-013-00-7	78-40-0	201-114-5		1 - 10%	Xn; R22

SECTION 4: First aid measures**4.1. Description of first aid measures**

Inhalation	Move the exposed person to fresh air.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Skin contact	Wash off immediately with plenty of soap and water.
Ingestion	DO NOT INDUCE VOMITING. Rinse mouth thoroughly. Seek medical attention if irritation or symptoms persist.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Harmful by inhalation.
Eye contact	Avoid contact with eyes.
Skin contact	Avoid contact with skin.
Ingestion	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

4.3. Indication of any immediate medical attention and special treatment needed

	If you feel unwell, seek medical advice (show the label where possible).
--	--

SECTION 5: Firefighting measures**5.1. Extinguishing media**

	Water. Dry chemical. Carbon dioxide (CO2).
--	--

5.2. Special hazards arising from the substance or mixture

	Carbon dioxide (CO2). Carbon monoxide. Nitrogen oxide. Hydrogen Cyanide.
--	--

5.3. Advice for firefighters

	Self-contained breathing apparatus.
--	-------------------------------------

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

	See section 8 for further information.
--	--

6.2. Environmental precautions

	Do not allow runoff water to enter sewers or drains.
--	--

6.3. Methods and material for containment and cleaning up

	Absorb with inert, absorbent material. Contact a licensed waste disposal company. Dispose of this material and its container to hazardous or special waste collection point.
--	--

6.4. Reference to other sections

	See section 12 and 13 for further information.
--	--

Resin 3175 B

Revision 0

Revision date 2012-04-23

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

	Keep container tightly closed in a cool place. Keep away from sources of ignition - No smoking.
--	---

7.2. Conditions for safe storage, including any incompatibilities

	Do not allow runoff water to enter sewers or drains. Keep container tightly closed and dry. Shelf life: Use within 3 months. Storage temperature: 25 - 35 °C.
--	---

7.3. Specific end use(s)

	In case of insufficient ventilation, wear suitable respiratory equipment.
--	---

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****8.1.1. Exposure Limit Values**

Resin 3175 B	WEL 8-hr limit ppm:	WEL 8-hr limit mg/m3: 0.07
	WEL 15 min limit ppm:	WEL 15 min limit mg/m3: 0.02

8.2. Exposure controls

	
8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area. Keep containers tightly closed. Keep in a cool, dry, well ventilated area.
8.2.2. Individual protection measures	Approved safety goggles. Protective clothing. Appropriate respiratory protection.
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Nitrile rubber gloves.
Skin protection - Other	Wear suitable protective clothing.
Respiratory protection	Suitable respiratory equipment.
8.2.3. Environmental exposure controls	Appropriate local exhaust ventilation is required.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Resin 3175 B

Revision 0

Revision date 2012-04-23

9.1. Information on basic physical and chemical properties

State	Liquid
Colour	Yellow
Odour	Mild
pH	Not applicable.
Melting point	Not applicable.
Boiling point	No data available
Flash point	= 191 °C
Evaporation rate	No data available
Flammability limits	No data available
Vapour Flammability	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Fat Solubility	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive	No data available
Oxidising	No data available
Solubility	= Insoluble in water

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

SECTION 10: Stability and reactivity

10.2. Chemical stability

	Exothermic reaction with amines and alcohols, reacts with water forming carbon dioxide.
--	---

10.4. Conditions to avoid

	Exposure to elevated temperatures can cause product to decompose. Avoid moisture. Material reacts slowly with water, releasing carbon dioxide.
--	--

10.5. Incompatible materials

	Avoid contact with: Acids. Alcohols. Amines. Water. Ammonia. Bases. Metal compounds. Moist air. Strong oxidizers.
--	---

10.6. Hazardous decomposition products

	Can occur. Elevated temperatures can cause hazardous polymerization. Polymerization can be catalyzed by: Strong bases. Water.
--	---

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Skin corrosion/irritation	Prolonged contact may cause skin irritation with local redness. Material may stick to skin causing irritation upon removal. May stain skin.
Serious eye damage/irritation	May cause eye irritation. May cause slight temporary corneal injury.
Respiratory or skin sensitisation	Skin contact may cause an allergic skin reaction. May cause allergic respiratory response.

11.1.4. Toxicological Information

Resin 3175 B

Revision 0

Revision date 2012-04-23

11.1.4. Toxicological Information

Resin 3175 B	Oral Rat LD50: 2000	Dermal Rabbit LD50: 2000
--------------	---------------------	--------------------------

SECTION 12: Ecological information

12.1. Toxicity

	No data available
--	-------------------

12.2. Persistence and degradability

	No data is available on this product.
--	---------------------------------------

12.3. Bioaccumulative potential

	No data is available on this product.
--	---------------------------------------

12.4. Mobility in soil

	No data is available on this product.
--	---------------------------------------

12.5. Results of PBT and vPvB assessment

	Not relevant.
--	---------------

SECTION 13: Disposal considerations

General information

	Do not dump into any sewers, on the ground, or into any body of water. Incineration under approved, controlled conditions using incinerators suitable or designed for the disposal of hazardous chemical wastes, is the preferred method for disposal.
--	--

Disposal methods

	Can be incinerated if in compliance with local authority regulations.
--	---

SECTION 14: Transport information

ADR/RID

	The product is not classified as dangerous for carriage.
--	--

IMDG

	The product is not classified as dangerous for carriage.
--	--

IATA

	The product is not classified as dangerous for carriage.
--	--

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations	COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
-------------	--

15.2. Chemical safety assessment

	R20 - Harmful by inhalation. R36/37/38 - Irritating to eyes, respiratory system and skin. R42/43 - May cause sensitisation by inhalation and skin contact. S23 - Do not breathe gas/fumes/vapour/spray. 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).
--	--

SECTION 16: Other information

Other information

	P102 - Keep out of reach of children. P103 - Read label before use. P14 - Safety data sheet available for professional user on request. P15 - Restricted to professional users.
--	---

Resin 3175 B

Revision 0

Revision date 2012-04-23

Other information

Text of risk phrases in
Section 3

R20 - Harmful by inhalation.
R22 - Harmful if swallowed.
R36/37/38 - Irritating to eyes, respiratory system and skin.
R40 - Limited evidence of a carcinogenic effect.
R42/43 - May cause sensitisation by inhalation and skin contact.
R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Further information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.