Material Safety Data Sheet

BluRez Carbostop W

WATER STOPPING POLYURETHANE RESIN

Bluey Technologies Pty Ltd
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1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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Web Site	http://www.bluey.com.au
Synonym(s)	987 - PRODUCT CODE • BLUREZ CARBOSTOP W • CARBOSTOP W
Use(s)	TWO COMPONENT, HIGH FOAMING CRACK INJECTION RESIN SYSTEM
MSDS Date	17 December 2007

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA

RISK 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.

SAFETY PHRASES

S23	Do not breathe gas/fumes/vapour/spray (where applicable).
S24/25	Avoid contact with skin and eyes.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN No.	None Allocated	**DG Class**	None Allocated	**Subsidiary Risk(s)**	None Allocated
Pkg Group	None Allocated	**Hazchem Code**	None Allocated	**EPG**	None Allocated

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
POLYMETHYL POLYPHENYL ISOCYANATE	Not Available	9016-87-9	>50%
ADDITIVES	Not Available	Not Available	remainder

Australia & Asia-Pacific
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4. FIRST AID MEASURES

Eye	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the PIC or a doctor, or for at least 15 minutes.
Inhalation	Leave area of exposure. If symptoms develop, seek urgent medical attention. If assisting a person exposed, wear a Type A (Organic vapour) respirator (or Air-line respirator in poorly ventilated areas). If person is not breathing, apply artificial respiration and seek urgent medical attention.
Skin	Remove contaminated clothing and gently flush affected areas with water. Seek medical attention if irritation develops. Launder clothing before reuse.
Ingestion	DO NOT induce vomiting. Immediately wash out mouth with water, and then give water to drink. Seek medical attention.
Advice to Doctor	Treat symptomatically.
First Aid Facilities	Eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES

Flammability	Combustible. May evolve toxic gases (carbon and nitrogen oxides, hydrocarbons, isocyanates, cyanides) when heated to decomposition.
Fire and Explosion	Combustible. Evacuate area and contact emergency services. Toxic gases (hydrocarbons, carbon/ nitrogen oxides, isocyanates, hydrogen cyanide) may be evolved. Remain upwind and notify those down wind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
Extinguishing	Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways. Absorb runoff with sand or similar.
Hazchem Code	None Allocated.

6. ACCIDENTAL RELEASE MEASURES

Spillage	If spilt (bulk), contact emergency services where appropriate. Wear splash-proof goggles, viton/nitrile gloves, a Type A (Organic vapour) respirator (or Air-line respirator in confined areas), coveralls and rubber boots. Ventilate and clear area of all unprotected personnel. Eliminate all ignition sources. Absorb spill with sand or similar, collect and place in sealable containers for disposal.

7. STORAGE AND HANDLING

Storage	Store in a cool, dry, well ventilated area, removed from oxidising agents, alcohols, acids, alkalis, amines, direct sunlight, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate fire protection and ventilation systems. Store as a Class C1 Combustible Liquid (AS1940).
Handling	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Stds

Ingredient	Reference	TWA		STEL	
		ppm	mg/m3	ppm	mg/m3
Isocyanates, all (as-NCO)	NOHSC (AUS)	0.02	0.07	--	--

Biological Limits No biological limit allocated.

Engineering Controls Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

PPE Wear a Type A (Organic vapour) Respirator, safety boots, nitrile or viton (R) gloves, coveralls and safety glasses. If sanding dry product, wear a Class P1 (Particulate) Respirator. If spraying, with prolonged use, or if in confined areas, wear impervious coveralls and an Air-line respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	BROWN LIQUID	**Solubility (water)**	INSOLUBLE
Odour	SLIGHT ODOUR	**Specific Gravity**	1.14
pH	NOT AVAILABLE	**% Volatiles**	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	**Flammability**	CLASS C1 COMBUSTIBLE
Vapour Density	NOT AVAILABLE	**Flash Point**	> 100°C
Boiling Point	> 260°C	**Upper Explosion Limit**	NOT AVAILABLE
Melting Point	NOT AVAILABLE	**Lower Explosion Limit**	NOT AVAILABLE
Evaporation Rate	NOT AVAILABLE	**Autoignition Temperature**	530°C

10. STABILITY AND REACTIVITY

Chemical Stability Stable under recommended conditions of storage.

Conditions to Avoid Avoid heat, sparks, open flames and other ignition sources.

Material to Avoid Incompatible with oxidising agents, acids, alcohols, amines, alkalis, heat and ignition sources. Reacts with water or moisture, generating carbon dioxide, which may cause container rupture.

Decomposition May evolve toxic gases (carbon and nitrogen oxides, hydrocarbons, isocyanates, cyanides) when heated to decomposition.

Hazardous Reactions May polymerise on contact with water or other materials that react with isocyanates.

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11. TOXICOLOGICAL INFORMATION

Health Hazard Summary Toxic - irritant. Avoid eye or skin contact and vapour inhalation. Over exposure to isocyanates may result in respiratory irritation with asthma-like symptoms. Potential skin and respiratory sensitiser. Exposure at high levels may result in permanent lung damage. Those individuals with pre-existing respiratory impairment are advised to avoid all exposure.

Eye Irritant. Exposure may result in lacrimation, irritation, pain, redness, conjunctivitis and possible corneal burns with prolonged contact.

Inhalation Irritant - toxic. Over exposure may result in irritation of the nose and throat, nausea, vomiting and sensitisation with onset of asthma - like symptoms. At high levels; dizziness, breathing difficulties and at very high levels pulmonary oedema. Chronic exposure may result in permanent lung damage.

Skin Irritant. Prolonged contact may result in irritation, skin rash, dermatitis, sensitisation and burns. Toxic effects may result through skin absorption.

Ingestion Toxic. Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, fatigue, dizziness, drowsiness and unconsciousness with large doses. Aspiration may result in chemical pneumonitis and pulmonary oedema.

Toxicity Data POLYMETHYL POLYPHENYL ISOCYANATE (9016-87-9)
LC50 (Inhalation): 490 mg/m3/4 hours (rat)
LD50 (Ingestion): 49,000 mg/kg (rat)
LD50 (Skin): > 9400 mg/kg (rabbit)

12. ECOLOGICAL INFORMATION

Environment Isocyanates will react with water producing carbon dioxide and forming a solid mass (polyurea) which is insoluble. Product will not accumulate or biomagnify in the environment.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Mix parts A + B together (small amounts), absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Ensure protective equipment is worn when mixing. Do not seal containers/tins until reaction is complete. Contact the manufacturer for additional information. Prevent contamination of drains or waterways as environmental damage may result.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Shipping Name	None Allocated				
UN No.	None Allocated	**DG Class**	None Allocated	**Subsidiary Risk(s)**	None Allocated
Pkg Group	None Allocated	**Hazchem Code**	None Allocated	**EPG**	None Allocated

15. REGULATORY INFORMATION

Poison Schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

AICS All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information This product is manufactured by Minova Australia P/L.

This product is used in conjunction with BluRez CarboAdd X.

ISOCYANATES: Asthma sufferers, respiratory impaired or previously sensitised individuals are advised to avoid all exposure to isocyanates. Please note that products containing isocyanates often require the preparation of safe working procedures before product is used.

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WELDING - SANDING - CUTTING DRIED OR CURED PRODUCT If sanding, cutting or welding dried or cured product, adverse health effects may be avoided by the use of appropriate engineering controls and/or personal protective equipment. If welding, wear a Class P2 (Metal fume) respirator and depending on the nature of the surface being welded, additional protection (eg. for organic vapours/acid gas) may also be required. A Class P1 (Particulate) respirator is recommended if dust is generated.

EPOXY - PHENOXY RESINS AND POLYURETHANES: Where spray painting with two or more component epoxy resins or polyurethane paints is undertaken, an employee shall wear a full face air-line respirator, full length chemically resistant coveralls and gloves. Further, if an individual is to enter an enclosed booth where a vapour or gas curing process is occurring, an air-line respirator is required. Once cured, these resins are considered non toxic.

ABBREVIATIONS:
ADB - Air-Dry Basis.
BEI - Biological Exposure Indice(s).
CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.
CNS - Central Nervous System.
IARC - International Agency for Research on Cancer.
M - moles per litre, a unit of concentration.
mg/m3 - Milligrams per cubic metre.
NOS - Not Otherwise Specified.
pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm - Parts Per Million.
TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Report Status

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS.

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End of Report