

Material Safety Data Sheet

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Infosafe No™ LPUB9 Issue Date : July 2008

ISSUED by BARNES

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Product Name **EASYCAST® PART A**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name EASYCAST® PART A

Company Name Barnes Products Pty Ltd (ABN 004 011 456)

Address 6 Homedale Road Bankstown
NSW 2200

Emergency Tel. (02) 9793 7555

Telephone/Fax Number Tel: (02) 9793 7555
Fax: (02) 9793 7091

Recommended Use Casting resin.

Other Information Information provided has been prepared in good faith and believed to be correct. Barnes Products Pty Limited make no warranty either express or implied as to completeness, accuracy thereof, misuse or misinterpretation of this information.

2. HAZARDS IDENTIFICATION

Hazard Classification Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Risk Phrase(s) 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 Phrase(s) S23 Do not breathe gas/fumes/vapour/spray
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S51 Use only in well ventilated areas.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	Diphenylmethane-4, 4'-diisocyanate	101-68-8	30-60 %
	Other ingredients determined not to be hazardous		Balance

Other Information Synonym: Methylene bisphenyl isocyanate (MDI).

4. FIRST AID MEASURES

Inhalation Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have qualified person give oxygen through a face mask if breathing is difficult. Seek medical attention.

Ingestion Do not induce vomiting. Wash out mouth with water. Seek immediate medical attention.

Skin Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. If symptoms develop seek medical attention.

Eye If contact with the eye(s) occur, wash with running water holding eyelid(s) open. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek medical attention.

First Aid Facilities Eye wash and normal washroom facilities.

Advice to Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media Water spray, water fog, foam, carbon dioxide and dry powder. Do not use water in a jet.

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Hazards from Combustion Products	Under fire conditions this product may emit toxic and/or irritating fumes including carbon monoxide, carbon dioxide, oxides of nitrogen, isocyanate vapours and traces of hydrogen cyanide.
Specific Hazards	Combustible liquid. This product will burn if exposed to fire.
Precautions in connection with Fire	Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Water may be used to cool containers to prevent pressure build-up or auto-ignition.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Wear appropriate personal protective equipment and clothing to minimise exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unnecessary personnel. If possible contain the spill. Place inert absorbent material onto spillage. Use clean non-sparking tools to collect the material and place into a suitable labelled container. Do not dilute material but contain. Dispose of waste according to federal, Environmental Protection Authority and state regulations. If contamination of sewers or waterways occurs inform the local water authorities and EPA in accordance with local regulations. Spilled area should be decontaminated with the following decontamination solution: 90% water, 2% detergent and 3-8% ammonia. Spilled material should be treated with the decontamination solution and containers left open in a well ventilated area for 48 hours. Do not seal the containers since carbon dioxide is generated upon contact with moisture and dangerous pressure buildup can occur.
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7. HANDLING AND STORAGE

Precautions for Safe Handling	Wear appropriate protective equipment to prevent inhalation and eye exposure. Use in designated areas with adequate ventilation. Prevent the creation of mist or vapours in the work atmosphere. Keep containers closed when not in use. Practice good personal hygiene, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities.
Conditions for Safe Storage	Store in a cool, dry well-ventilated area away from heat, sources of ignition, oxidising agents, foodstuffs, and clothing and out of direct sunlight. Store between 101 and 35°C. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Do NOT pressurise, cut, heat or weld containers as they may contain hazardous residues. For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids. Reference should also be made to all State and Federal regulations.
Storage Regulations	Classified as a Class C1 (COMBUSTIBLE LIQUID) for the purposes of storage and handling, in accordance with the requirements of AS1940. For information on the design of the store-room reference should be made to Australian Standard AS1940, The Storage and Handling of Flammable and Combustible Liquids. Reference should also be made to any relevant Commonwealth, State or Territory regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure standards have been established for this material by the National Occupational Health & Safety Commission (NOHSC). However, exposure standards for ingredients are stated below.
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SUBSTANCE	TWA		STEL		NOTICES
	ppm	mg/m ³	ppm	mg/m ³	
Isocyanates (all)	-	0.02	-	0.07	Sen

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Sen' notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance.

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Engineering Controls	Provide sufficient ventilation to keep airborne levels below the exposure limits. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 2430.3.1:1997 : Classification of hazardous areas - Examples of area classification - General, for further information concerning ventilation requirements.
Respiratory Protection	If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable mist/organic vapour filter should be used. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.
Eye Protection	Safety glasses with side shields or goggles as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.
Hand Protection	Wear laminated film, nitrile, PVC or other impervious, suitable gloves conforming to AS/NZS 2161: Occupational protective gloves.
Body Protection	Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist. Industrial clothing should conform to the specifications detailed in AS/NZS 2919: Industrial clothing.
Other Information	No biological limit allocated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear yellow liquid.
Odour	Mild acrid odour.
Melting Point	Not available
Boiling Point	Not available
Solubility in Water	Insoluble, reacts with water.
Specific Gravity	1.20 at 25°C
pH Value	Not applicable
Vapour Pressure	0.0007 mmHg at 20°C (estimated)
Vapour Density (Air=1)	Not available
Viscosity	<150 cP
Flash Point	>148°C
Flammability	Combustible liquid.
Auto-Ignition Temperature	Not available
Flammable Limits - Lower	Not available
Flammable Limits - Upper	Not available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions of storage and handling.
Conditions to Avoid	Avoid moisture, heat, direct sunlight, open flames or other sources of ignition. Avoid temperatures above 35°C.
Incompatible Materials	Incompatible with oxidising agents, water, acids, bases, alcohols and some metals (eg aluminium, copper, brass).
Hazardous Decomposition Products	Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon monoxide, carbon dioxide, oxides of nitrogen, traces of isocyanate and traces of hydrogen cyanide.

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Product Name **EASYCAST® PART A**

Hazardous Reactions Will react with water, acids, bases, alcohols and amines. Reaction with water liberates carbon dioxide.

Hazardous Polymerization Hazardous self-polymerisation may occur at elevated temperatures.

11. TOXICOLOGICAL INFORMATION

Toxicology Information No toxicity data are available for this specific product. The available data for the ingredients are as follows:

For Diphenylmethane-4,4'-diisocyanate:

LC50 (Inhalation, Rat): 178 mg/m³

LD50 (Oral, Rat): 9,200 mg/m³

LD50 (Oral, Mouse): 9,200 mg/m³

Inhalation Harmful by inhalation. Inhalation of product vapours will cause irritation of the nose, throat and respiratory system. Breathing vapour may cause an asthma like reaction. May cause sensitisation by inhalation.

Ingestion Ingestion of this product may irritate the gastric tract, causing nausea and vomiting.

Skin Irritating to skin resulting in redness and itching. May cause sensitisation by skin contact.

Eye Irritating to eyes. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Chronic Effects Prolonged or repeated skin contact may lead to allergic contact dermatitis and sensitisation in some individuals. Prolonged or repeated exposure through inhalation of vapours/fumes may lead to respiratory sensitisation and occupational asthma. Long term over-exposure may result in impaired lung function.

12. ECOLOGICAL INFORMATION

Ecotoxicity Not available

Persistence / Degradability Not available

Mobility Not available

Bioaccumulative Potential Not available

Environ. Protection Prevent this material entering waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations Dispose of waste according to federal, EPA and state regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain hazardous residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Advise combustible nature.

14. TRANSPORT INFORMATION

Transport Information Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. REGULATORY INFORMATION

Regulatory Information Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.

Classified as a Scheduled Poison S6 according to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

Poisons Schedule S6

Hazard Category Harmful, Irritant

16. OTHER INFORMATION

Date of preparation MSDS Reviewed: July 2008

or last revision of Supersedes: March 2005

MSDS

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Product Name **EASYCAST® PART A**

Contact

Person/Point

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