

# Material Safety Data Sheet

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Infosafe No. LPUBA Issue Date : March 2005 ISSUED by BARNES

Product Name : **PROCAST® PART A**

Classified as hazardous according to criteria of NOHSC

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

**Product Name** PROCAS<sup>TM</sup> PART A  
**Product Use** Casting resin.  
**Company Name** Barnes Products Pty Ltd (ABN 004 011 456)  
**Address** 6 Homedale Road Bankstown  
NSW 2200  
**Emergency Tel.** (02) 9793 7555  
**Telephone Number/Fax** Tel: (02) 9793 7555 Fax: (02) 9793 7091

<b>Other Names</b>	<u>Name</u>	<u>Product Code</u>
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SUPERCAST® PART A

**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. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Ingredients</b>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Distillates (petroleum), catalytic reformer fractionator residue, low boiling	68477-31-6	30-60 %
	Diphenylmethane-4,4'-diisocyanate	101-68-8	10-30 %
	Naphthalene	91-20-3	10-30 %

## 3. HAZARDS IDENTIFICATION

Classified as hazardous according to the criteria of NOHSC.  
Classified as a dangerous good according to the ADG Code.

### RISK PHRASES:

R20/22 Harmful by inhalation and if swallowed.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R42/43 May cause sensitisation by inhalation and skin contact  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### SAFETY PHRASES:

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.  
S61 Avoid release to the environment. Refer to special instructions/safety data sheet.  
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

## 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. If symptoms develop seek medical attention.

**Ingestion** Do NOT induce vomiting. Wash out mouth with water. Do not give anything by mouth to an unconscious person. Seek 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.

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**Eye** If contact with the eye(s) occur, wash with running water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. In all cases of eye contamination it is a sensible precaution to seek medical advice.

**First Aid Facilities** Eye wash and normal washroom facilities.

**Advice to Doctor** Treat symptomatically or consult a Poisons Information Centre (Phone 131 126).

## 5. FIRE FIGHTING MEASURES

**Extinguishing Media** Keep containers cool with water spray. Do not use water in a jet. Water spray, foam, carbon dioxide and dry powder.

**Specific Hazards** Combustible liquid. This product will burn if exposed to fire.

**Hazardous Combustion Products** Under fire conditions this product may emit toxic and/or irritating fumes including carbon monoxide, carbon dioxide, oxides of nitrogen, aldehydes and traces of hydrogen cyanide.

**Precautions in connection with Fire** Fire-fighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode.

## 6. ACCIDENTAL RELEASE MEASURES

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 large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.

## 7. HANDLING AND STORAGE

**Handling** Use in a well ventilated area. DO NOT store or use in confined spaces. Build up of mists or vapours in the atmosphere must be prevented. Avoid breathing in spray or mists or vapours. Do not use near welding or other ignition sources and avoid sparks. Do not smoke. When dealing with large quantities, repeated or prolonged skin exposure without protection should be prevented in order to lessen the possibility of skin disorders. It is essential that all who come into contact with this material maintain high standards of personal hygiene ie. washing hands prior to eating, drinking, smoking or using toilet facilities.

**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. 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.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

**Exposure Limits** 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.

SUBSTANCE	TWA		STEL		NOTICES
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Diphenylmethane-4,4'-diisocyanate	-	0.02	-	0.07	Sens
Naphthalene	10	52	15	79	

'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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<b>Other Exposure Information</b>	TWA - the Time-Weighted Average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life. 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. According to current knowledge these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers.
<b>Respiratory Protection</b>	If engineering controls are not effective in controlling airborne exposure then respiratory protective equipment should be used suitable for protecting against airborne contaminants. Final choice of appropriate breathing protection is dependant upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. 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.
<b>Eye Protection</b>	Safety glasses with side shields, goggles or full-face shield as appropriate recommended. 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.
<b>Hand Protection</b>	Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.
<b>Body Protection</b>	Wear appropriate clothing including chemical resistant apron where clothing is likely to be contaminated. It is advisable that a local supplier of personal protective clothing is consulted regarding the choice of material.
<b>Eng. Controls</b>	Use with good general ventilation. If mists or vapours are produced local exhaust ventilation should be used.
<b>Other Information</b>	No biological limit allocated.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Light to dark amber viscous liquid
<b>Odour</b>	Naphtha odour
<b>Melting Point</b>	Not available.
<b>Boiling Point</b>	>205°C (decomposes)
<b>Solubility in Water</b>	Insoluble, reacts with water
<b>Specific Gravity (H2O=1)</b>	1.2
<b>pH Value</b>	7.8
<b>Vapour Pressure</b>	< 0.0001 mmHg
<b>Vapour Density (Air=1)</b>	Approx. 6
<b>Volatile Component</b>	40%
<b>Flash Point</b>	95.5°C
<b>Flammability</b>	Classified as a Class C1 (COMBUSTIBLE LIQUID) for the purposes of storage and handling, in accordance with the requirements of AS1940. This product should be stored and used in a well ventilated area away from naked flames, sparks and other sources of ignition.
<b>Ignition Temperature</b>	Not available
<b>Flammable Limits LEL</b>	Not available
<b>Flammable Limits UEL</b>	Not available

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions of storage and handling.
<b>Hazardous Polymerization</b>	May occur at temperatures above 175°C and on contact with water resulting in the emission of carbon monoxide, carbon dioxide and ammonia.

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<b>Materials to Avoid</b>	Incompatible with water, strong bases, alcohols, metal compounds and surface active agents. Will cause some corrosion to copper alloys and aluminium.
<b>Hazardous Decomposition Products</b>	Thermal decomposition at temperatures greater than 205°C may result in the release of toxic and/or irritating fumes including carbon monoxide, carbon dioxide, oxides of nitrogen, aldehydes and traces of hydrogen cyanide.
<b>Hazardous Reaction</b>	Will react with water, strong bases, alcohols, metal compounds and surface active agents.
<b>Conditions to Avoid</b>	Avoid moisture, heat, direct sunlight, open flames or other sources of ignition. Avoid temperatures greater than 175°C.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicology Information</b>	LC50 (rat, inhalation) = approx. 370 mg/cm/4H LD50 (rat, oral) = > 10,000 mg/kg LD50 (rabbit, skin) = > 10,000 mg/kg
<b>Inhalation</b>	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.
<b>Ingestion</b>	Harmful if swallowed. Ingestion of this product will irritate the gastric tract causing nausea and vomiting.
<b>Skin</b>	Irritating to skin resulting in redness and itching.
<b>Eye</b>	Irritating to eyes. On eye contact this product will cause tearing, stinging, blurred vision, and redness.
<b>Chronic Effects</b>	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 sensitisation and occupational asthma.

## 12. ECOLOGICAL INFORMATION

<b>Environ. Protection</b>	This product is very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.
<b>Mobility</b>	Prevent this material entering waterways, drains and sewers.
<b>Persistence / Degradability</b>	No data is available for this material.
<b>Ecotoxicity</b>	Aquatic LC50 (24hr) > 500mg/L

## 13. 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

	This material is a Class 9 - Miscellaneous Dangerous Good according to The Australian Code for the Transport of Dangerous Goods by Road and Rail. These substances are incompatible in a placard load with any of the following: - Class 1, Explosives (when the class 9 substance is a fire risk substance), - Class 5.1, Oxidizing agents (when the class 9 substance is a fire risk substance), and - Class 5.2, Organic peroxides (when the class 9 substance is a fire risk substance).
<b>U.N. Number</b>	3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.* - (CONTAINS NAPHTHALENE)
<b>DG Class</b>	9
<b>Hazchem Code</b>	2X
<b>Packaging Method</b>	5.9.9
<b>Packing Group</b>	III
<b>EPG Number</b>	9C1

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IERG Number 47

## 15. REGULATORY INFORMATION

**Risk Phrase** R20/22 Harmful by inhalation and if swallowed.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R42/43 May cause sensitisation by inhalation and skin contact  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phrase** 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.  
S61 Avoid release to the environment. Refer to special instructions/safety data sheet.  
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

**Poisons Schedule** S6

**Hazard Category** Harmful, Irritant, Dangerous for the environment

## 16. OTHER INFORMATION

**Contact Person/Point**

**SDS History** MSDS Creation: March 2005  
...End Of MSDS...