

MATERIAL SAFETY DATA SHEET

According to NOHSC: 2011 (2003) and HSNO CoP 8-1 (September 2006)

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: MBRACE SATURANT PART B

Other name: None allocated

Recommended use: Part B of a two component, epoxy saturant for the MBrace carbon fibre system.

Supplier: BASF Construction Chemicals Australia Pty Ltd. BASF New Zealand Ltd.
ABN 46 000 450 288

Address: 11 Stanton Road, Seven Hills, NSW, 2147 Australia 45 William Pickering Drive, Albany, Auckland, New Zealand

Telephone number: +61 2 8811 4200 +64 9 414 7233

Facsimile: +61 2 8811 3299 +64 9 414 7244

Emergency telephone number: +61 417 658 263

2. HAZARDS IDENTIFICATION

Hazard classification: HAZARDOUS SUBSTANCE. DANGEROUS GOODS
Dangerous goods for transport according to the ADG code
Hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

Hazard Designation: C Corrosive

HSNO Classification

6.1D	Acutely toxic (dermal, oral, inhalation)
6.5B	Contact sensitiser (dermal)
8.2C	Corrosive to dermal tissue
8.3A	Corrosive to ocular tissue

Risk phrase(s):

R20/21/22	Harmful by inhalation, in contact with the skin and if swallowed
R34	Causes burns
R43	May cause sensitisation by skin contact

Safety phrase(s):

S24/25	Avoid contact with skin and eyes
S26	In case of contact with eyes rinse immediately with plenty of water and seek medical attention.
S28	After contact with skin, wash immediately with plenty of water and seek medical attention
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
S51	Use only in well ventilated areas.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation: Hardener for concrete adhesive resins based on amines

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Proportion</u>
Isophoronediamine	2855-13-2	> 60%
Benzyl alcohol	100-51-6	10 - < 30%
Salicylic acid	69-72-7	< 10%
Non hazardous ingredients		To 100%

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4. FIRST AID MEASURES

- Inhalation: Use in well ventilated areas. If inhalation does occur, remove victim from exposure. If difficulty with breathing, administer oxygen. If breathing has stopped administer artificial respiration. Seek medical attention.
- Eyes: While holding eyes open, gently flood with plenty of fresh water for 15 minutes. Seek medical attention. Skilled personnel should only undertake removal of contact lenses after an eye injury.
- Skin: Remove contaminated clothing. Remove excess from skin mechanically. Wash contacted areas thoroughly with soap and water. If irritation develops seek medical attention. Wash contaminated clothing before re-use.
- Ingestion: Not a normal route of injury. Do not induce vomiting; give large quantities of water; get immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquids into lungs. Do NOT give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

- Suitable extinguishing media: Foam, CO₂ and Dry Chemical
- Hazards from combustion products: Not normally combustible. Oxides of carbon and nitrogen and other possibly toxic fumes from fire.
- Precautions and equipment for fire fighters: Full protective clothing (as per personal protection in section 8).
- Hazchem code: 3X

6. ACCIDENTAL RELEASE MEASURES

- Methods and materials for containment and clean up: Spills should be contained by dyking and absorbing with dry inert filler (e.g. vermiculite, sand or soil), which can then be collected and removed mechanically by shovelling into appropriately labelled drums. Disposal should be effected by an approved waste disposal organisation according to local regulations.
- Environmental precautions: Do not allow to enter into drains, sewers or waterways.

7. HANDLING AND STORAGE

- Precautions for safe handling: Wear personal protective equipment (PPE) as per Section 8. Provide for good ventilation. Avoid inhalation of vapours or fumes. Avoid skin and eye contact.
- Conditions for safe storage: Keep containers tightly closed; store under cool dry conditions. Keep out of reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering Controls: Ensure adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particles below the OEL (Occupational Exposure Limit), suitable respiratory protection must be worn.
- Exposure Standards Not available
- Personal Protective Equipment (PPE):
- Respiratory protection: If ventilation inadequate, use a dual cartridge respirator suitable for amine vapours or air fed respirator.
- Glove type (AS2161): Impervious gloves e.g. PVC or nitrile rubber gauntlets.
- Eye protection: Chemical worker's goggles, well fitting safety glasses or full face shield.

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<u>Clothing:</u>	No special clothing required but overalls or other suitable industrial clothing which provides full skin coverage are suggested as a general precaution, especially where heavy contamination is likely.
<u>Other:</u>	Use barrier creams to protect skin from contact with the material. Do not eat drink or smoke while working with the material. Always wash hands before smoking, eating, drinking or using the toilet and after finishing work. Observe the usual precautions when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearance:</u>	Clear, colourless to slight amber low viscosity liquid
<u>Odour:</u>	Ammoniacal odour.
<u>pH:</u>	> 12
<u>Solubility in water:</u>	Insoluble. Hydrophobic.
<u>Specific gravity:</u>	0.96 - 1.00 kg/L at 23°C
<u>Flash point:</u>	> 100°C

10. STABILITY AND REACTIVITY

<u>Chemical stability:</u>	Normally stable when stored in original sealed containers in cool dry conditions. Not sensitive to mechanical impact.
<u>Incompatible materials:</u>	Keep away from epoxy resins, oxidising agents, alkalis and acids.
<u>Hazardous decomposition products:</u>	Oxides of carbon and other possibly toxic fumes from fire or if heated to decomposition.
<u>Hazardous reactions:</u>	Reacts with epoxy resins generating heat to form a rigid mass. In large volumes this could be significant with possible fire resulting and release of fumes.

11. TOXICOLOGICAL INFORMATION

<u>Health Hazard Summary:</u>	Susceptible individuals may develop allergic reactions such as dermatitis or asthma like symptoms on a single significant skin exposure or may become sensitised to the material on repeated contact. Corrosive to eyes and skin. May cause sensitisation by skin contact or by inhalation.
<u>Inhalation:</u>	Harmful by inhalation. Respiratory tract Irritant.
<u>Eyes:</u>	Corrosive. May cause permanent damage to the eye.
<u>Skin contact:</u>	Corrosive. Repeated or prolonged exposure may cause dermatitis or sensitisation
<u>Ingestion:</u>	Harmful if swallowed.
<u>Toxicity Data:</u>	Oral, rat LD ₅₀ > 1000mg/kg

12. ECOLOGICAL INFORMATION

<u>Ecology:</u>	Do not discharge into drains, sewers or waterways. Degradability not determined.
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13. DISPOSAL CONSIDERATIONS

<u>Disposal method and containers:</u>	Ensure containers are sealed. Avoid mist generation. Dispose of to an approved land fill site. Refer to Waste Management Authority.
<u>Special precautions (landfill/incineration):</u>	None known

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14. TRANSPORT INFORMATION

<u>UN number:</u>	2735
<u>UN proper shipping name:</u>	AMINES, LIQUID, CORROSIVE, N.O.S. (Contains ISOPHORONEDIAMINE)
<u>Dangerous goods class:</u>	8
<u>Subsidiary risk:</u>	None allocated
<u>Packing group:</u>	III
<u>Hazchem code:</u>	3X

15. REGULATORY INFORMATION

NICNAS / AICS:	All components are listed
Poisons Schedule:	Schedule 5
HSNO Classifications:	6.1D, 6.5B, 8.2C, 8.3A
ERMA Group Standard:	HSR002544
ERMA / NZIoC:	All components are listed
Tracking:	Not required
Approved Handler:	Not required

16. OTHER INFORMATION

Reason for issue: Update to combined Australia and New Zealand MSDS.

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request. All information contained in this MSDS is as accurate and up-to-date as possible. No warranty expressed or implied is made as to its accuracy, reliability or completeness.