

GEMCUTS PTY LTD

Date of Issue 04-05-2020

**SAFETY DATA SHEET
EPOXY 330A**

IMPORTANT NOTICE: This Safety Data Sheet (SDS) is issued by Gemcuts Pty Ltd in accordance with National Occupational Health and Safety Commission guidelines. The information contained in this document must not be added to, deleted or altered. Gemcuts Pty Ltd will issue a new SDS when there is a change in the product specifications and/or with the National Occupational Health and Safety Commission guidelines/ regulations. Gemcuts Pty Ltd will not accept any responsibility for any changes made to its SDS in content by any other person or organisation.

CLASSIFICATION OF MATERIAL

This material is hazardous according to health criteria of Worksafe Australia

1. IDENTIFICATION OF THE MATERIAL & SUPPLIER

Product	Epoxy 330A
Recommended Use	Epoxy Resin
Supplier/Importer	Gemcuts Pty Ltd
ABN	43 780 687 841
Manufacturer	Hughes Associates LLC
Address	36A Smith Drive, West Ballina NSW 2478
Telephone Number	02 66811686
Facsimile	N/A
Email	admin@gemcuts.com.au
Emergency Telephone	131126 Poisons Information Centre 0427012014

SAFETY DATA SHEET**2. HAZARDS IDENTIFICATION**

Signal Word: WARNING

2.1 Hazards Classification: Hazardous substance. Non-Dangerous Goods

STOT single – category 3 (Respiratory tract irritation)

Skin sensitisation – category 1

Skin Corrosion/irritant – category 2

Serious eye damage/Eye irritant – category 2A

2.2 Hazard Phrases:

H315: Causes skin and eye irritation

H319: Causes serious eye irritation

H317: May cause an allergic skin reaction

H335: May cause respiratory irritation

2.3 Precautionary Phrase(s)

P261: Avoid breathing dust/fumes/vapours

P280: Wear protective gloves/clothing/eye protection/face protection

P264: Wash thoroughly after handling

P272: Contaminated work clothing should not be allowed out of the workplace

P271: Use only outdoors or in a well-ventilated area.

P304: IF INHALED

P340: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P314: Get medical advice/attention if you feel unwell.

P302: IF ON SKIN

P352: Wash with plenty of water

P362+P364: Take off contaminated clothing and wash before reuse

P333+P313: IF SKIN irritation or rash occurs. Get medical advice/attention

P305/351/338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: IF EYE irritation persists. Get medical advice/attention

P405: Store locked up.

P501: Dispose of contents/container in accordance with all regional, national and international regulations.

Emergency Overview: Avoid contact to skin and inhaling. Always seek medical attention if unwell or are concerned.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product Description: Clear liquid mixture

3.2 Contents

Chemical Name	CAS Number	Proportion %
4,4-Isopropylidenediphenol-Epichlorohydrin Copolymer	25068-38-6	100

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre,

Phone (Australia) 131 126

Inhalation: Remove promptly to fresh air. Rescuer should be aware of fumes still present. If not breathing, provide artificial respiration. Medical attention should be sought if symptoms develop or persist. If unconscious, place in the recovery position and get medical attention immediately. Maintain an open airway.

Skin Contact: Immediately remove contaminated clothing. Wash skin with water and soap. Launder contaminated clothing before re-use. Seek medical attention.

Eye Contact: Flush eye with running water for a minimum of 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing. Seek medical attention.

Ingestion: Rinse mouth with water. Remove dentures if present. Remove victim to fresh air. If conscious give small amounts of water to drink. Stop if person feels unwell. If vomiting occurs the head should be kept low to prevent vomit from entering lungs. If unconscious, place in the recovery position and Get medical attention immediately. Maintain an open airway.

Get medical attention if adverse health effects persist or are severe.

Note to Doctor: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. FIRE FIGHTING MEASURES

5.1 Explosion Hazard: None noted.

5.2 Fire Fighting Advice: Full fire kit and breathing apparatus is required. If safe to do so, remove containers from path of fire as a heated container may burst.

5.3 Suitable Extinguishing Media: Use media suitable for the surrounding fire.

5.4 Thermal Decomposition: CO₂, CO and halogenated compounds.

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6. ACCIDENTAL RELEASE MEASURES

Emergency Action: Isolate the area and remove any persons not involved in the clean-up. Contain the spill for salvage or absorb in inert absorbent material (e.g. Soil, sand, vermiculite) for disposal by an approved method. Small spills can be picked up with dry earth material.

For large spills, stop leak if possible. Pick up material with vermiculite or similar. Prevent run-off into soil, drains and water ways. If contamination of sewers or waterways has occurred, advise the local emergency services.

Avoid breathing in vapour or mist. Use appropriate personal protective measures (section 8) and keep area well ventilated.

Never return spills to the original container for reuse.

7. HANDLING & STORAGE

7.1 Handling Advice: Use in well ventilated areas. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor. Wash thoroughly after handling. Eating, drinking and smoking should be prohibited in areas where material is handled. Avoid release to the environment.

For PPE see section 8

7.2 Storage Advice: Store in original container closed tightly. Store away from direct sunlight and keep in a dry, cool and well-ventilated area. Store away from incompatible materials. See Section 10.

Do not store in unlabelled containers.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Occupational Exposure Limits: National Occupational Exposure Standard (NES), Safe Work Australia (formerly ASCC/NOHSC).

Bisphenol-A-(epichlorohydrin) 25068-38-6 Not Listed

Subsequent reference: Epichlorohydrin 106-89-8 TWA 7.6mg/m³

8.2 Engineering Control Measures: Ensure ventilation is adequate to maintain air quality. Use with local exhaust ventilation and mechanical ventilation, wear an air purifying respirator if not able to do so.

8.3 Personal Protective Equipment:

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, APPROVED AIR RESPIRATOR.

Avoid eye contact by wearing chemical goggles with side-shields or face-shield (AS/NZS 1336) whenever exposed to vapour or mist or if there is a risk of splashing liquid in the eyes. Safety showers with eyewash should be provided in all areas where product is handled.

Protective clothing (gloves, coveralls, boots, etc.) should be worn to prevent skin contact. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using. Contaminated clothing should not leave the workplace.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical State:	Liquid
Colour:	Clear
Odour:	Ammonia like
Solubility:	Negligible
Density	1.17
Flash Point (°C):	251°C
Boiling Point (°C)	260°C

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10. STABILITY & REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Extreme temperatures and direct sunlight. Contact with incompatible material.

Hazardous Reactions: Hazardous polymerisation will not occur under normal conditions.

Incompatible Materials: Will react with strong oxidizing agents, acids and aliphatic amines.

Hazardous Decomposition: Under normal conditions and use none should be produced.

11. TOXICOLOGY INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Toxicity:

4,4-Isopropylidenediphenol-Epichlorohydrin Copolymer

LD50 Oral Rat 11400mg/kg

LD50 Dermal Rat 2000mg/kg

Inhalation: May cause respiratory irritation

Ingestion: Irritating to the mouth, throat and stomach.

Eye Contact: Causes serious eye irritation.

Skin Contact: Contact with skin may result in irritation and redness. May cause an allergic skin reaction.

Carcinogen: Not available

Mutagenicity: Not available

Reproductive Toxicity: None observed

Chronic: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels

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12. ECOLOGICAL INFORMATION

Ecotoxicity:

Bisphenol-A-(epichlorhydrin)

Acute LC50 1.3mg/L Fish 96Hr

EC50 2.1mg/L Aquatic invertebrates, water flea 48Hr

NOEC 0.3mg/L Aquatic invertebrates, water flea 21D

LC50 >11mg/L Aquatic plants – algae 72Hr

Degradability: No data**Bio accumulative Potential:**

4,4-Isopropylidenediphenol-Epichlorohydrin Copolymer

LogPow 2.64 – 3.78 BCF 3 – 31 31.00 Potential Low

Mobility in Soil: No Data. No know significant effects

13 DISPOSAL CONSIDERATIONS

Product waste should be minimised wherever possible.

Product must not be disposed to the sewerage systems, drains or waterways untreated.

Dispose of in accordance with Local/State/Commonwealth regulations.

14. TRANSPORT INFORMATION

14.1 **Road and Rail Transport:** ADG

Not regulated

14.2 **Marine Transport:** IMDG

Not regulated

14.3 **Air Transport:** IATA

Not regulated

15. REGULATORY INFORMATION

Australian Dangerous Goods Code, No. 6 [National Road Transport Commission]

Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational

Environment [NOHSC:1003(1995)]

ASNZS 1715/16 Respiratory protective devices.

Safe Work Australia

IATA

IMDG

NES

SAFETY DATA SHEET**16. OTHER INFORMATION**

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Gemcuts Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. If clarification or further information is needed, the user should contact Gemcuts Pty Ltd at the contact details on page 1.

Gemcuts Pty Ltd responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

GEMCUTS PTY LTD

Date of Issue 05-05-2020

SAFETY DATA SHEET**EPOXY 330B**

IMPORTANT NOTICE: This Safety Data Sheet (SDS) is issued by Gemcuts Pty Ltd in accordance with National Occupational Health and Safety Commission guidelines. The information contained in this document must not be added to, deleted or altered. Gemcuts Pty Ltd will issue a new SDS when there is a change in the product specifications and/or with the National Occupational Health and Safety Commission guidelines/ regulations. Gemcuts Pty Ltd will not accept any responsibility for any changes made to its SDS in content by any other person or organisation.

CLASSIFICATION OF MATERIAL

This material is hazardous according to health criteria of Worksafe Australia

1. IDENTIFICATION OF THE MATERIAL & SUPPLIER

Product	Epoxy 330B
Recommended Use	Curing Agent
Supplier/Importer	Gemcuts Pty Ltd
ABN	43 780 687 841
Manufacturer	Hughes Associates LLC
Address	36A Smith Drive, West Ballina NSW 2478
Telephone Number	02 66811686
Facsimile	N/A
Email	admin@gemcuts.com.au
Emergency Telephone	131126 Poisons Information Centre 0427012014

SAFETY DATA SHEET

2. HAZARDS IDENTIFICATION

Signal Word: DANGER

2.1 Hazards Classification: Hazardous substance. Non-Dangerous Goods

Acute Toxicity Oral – Cat 4

Skin corrosion/irritant – Cat 1C

Serious Eye damage/irritant – Cat 1

Respiratory sensitization – Cat 1

Skin Sensitization – Cat 1

Toxic to reproduction – Cat 2

STOT Single, skin and lungs – Cat 1

STOT Single, respiratory tract – Cat 3

STOT Repeated, blood system, liver, lungs – Cat 1

2.2 Hazard Phrases:

H302: Harmful if swallowed

H314: Causes severe skin burns and eye damage

H317: May cause an allergic skin reaction

H318: Causes serious eye damage

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335: May cause respiratory irritation

H361F: Suspected of damaging fertility

H361D: Suspected of damaging the unborn child

H370: Causes damage to organs (eyes)

H372: Causes damage to organs through prolonged or repeated exposure (skin, respiratory tract, kidneys, liver)

2.3 Precautionary Phrase(s)

P201: Obtain special instructions

P202: Do not handle until all safety precautions have been read and understood

P281: Use PPE as required

P280: Wear protective gloves/clothing/eye protection/face protection

P285: In case of inadequate ventilation wear respiratory protection

P271: Use only outdoors or in a well-ventilated

P260: Do not breathe dust/fume/gas/mist/vapours/spray

P270: Do not eat, drink or smoke when using this product

Hazard Identification Continued...

P264: Wash hands thoroughly after handling

P272: Contaminated work clothing should not be allowed out of the workplace

P314: Get medical advice/attention if you feel unwell.

P307: IF exposed:

P311: Call a POISON CENTER or doctor

P304: IF INHALED:

P340: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P310: Immediately call a POISON CENTER or doctor/physician

P342: If experiencing respiratory symptoms:

P311: Call a POISON CENTER or doctor

P301: IF SWALLOWED:

P310: Immediately call a POISON CENTER or doctor/physician

P330: Rinse mouth

P331: Do NOT induce vomiting

P303: IF ON SKIN (or hair)

P361: Take off immediately all contaminated clothing

P353: Rinse skin with plenty of water

P363: Wash contaminated clothing before reuse

P310: Immediately call a POISON CENTER or doctor/physician

P302: IF ON SKIN:

P353: Rinse skin with plenty of water

P333+P313: IF SKIN irritation or rash occurs: Get medical advice/attention.

P305: IF IN EYES:

P351: Rinse cautiously with water for several minutes

P338: Remove contact lenses, if present and easy to do. Continue rinsing

P310: Immediately call a POISON CENTER or doctor/physician

P405: Store locked up

P501: Dispose of contents/container in accordance with local, regional, national and international regulations

Emergency Overview: Always Seek medical attention if in doubt with contact with this product.

SAFETY DATA SHEET

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.3 Product Description: Mixture

3.4 Contents

Chemical Name	CAS Number	Proportion %
Diethylenetriamine	111-40-0	Unknown
Phenol, 4-Nonyl, Branched	84852-15-3	Unknown
N(aminoethyl)piperazine	140-31-8	Unknown

4. FIRST AID MEASURES

**For advice, contact a Poisons Information Centre,
Phone (Australia) 131 126**

Inhalation: Remove promptly to fresh air. Medical attention should be sought immediately. Keep at rest in a comfortable position for breathing. Rescuer should have appropriate breathing respirator if fumes are still present. If not breathing, artificial respiration should be given. If unconscious, place in the recovery position and get medical attention. Maintain an open airway, loosen clothing if required. In the case of inhalation of decomposition product in a fire, symptoms may be delayed. The exposed person should be kept under medical supervision for 48Hrs.

Skin Contact: Immediately remove contaminated clothing. Wash skin with water and soap. Contact a poisons centre and seek medical attention. Continue to rinse skin with water for another 10mins. Chemical burns should be treated promptly by a doctor. Launder contaminated clothing before re-use. If skin disorder develops seek medical attention.

Eye Contact: Flush eye with running water for a minimum of 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing lifting eye lids periodically. Seek medical attention promptly. Chemical burns must be treated by a doctor.

Ingestion: Rinse mouth. Get medical attention immediately. Call a poison centre. Remove dentures if any. Remove victim to fresh air and keep at rest in a comfortable position for breathing. If conscious, give small amounts of water to drink. Stop if victim feels unwell. Never give anything my mouth to an unconscious person. If unconscious, place in recovery position and seek medical attention. Maintain an open airway. Loosen clothing if needed. Do not induce vomiting unless directed to do so by a doctor.

Note to Doctor: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed persons may need to be kept under medical surveillance for 48Hrs.

SAFETY DATA SHEET

5. FIRE FIGHTING MEASURES

- 5.3** Explosion Hazard: None noted. Heat may cause container to expand and burst.
- 5.4** Fire Fighting Advice: Full fire kit and breathing apparatus is required. If safe to do so, remove containers from path of fire.
- 5.3** Suitable Extinguishing Media: Use suitable extinguishing media for surrounding fire.
- 5.4** Hazardous Decomposition: Carbon dioxide, carbon monoxide and nitrogen oxides.

6. ACCIDENTAL RELEASE MEASURES

Emergency Action: Isolate the area and remove any persons not involved in the clean-up. Avoid breathing vapours. Contain the spill for salvage or absorb in inert absorbent material (e.g. Soil, sand, vermiculite) for disposal by an approved method. Small spills can be picked up with a dry material or vermiculite. Large spills need to be first contained, stop the leak, then pick up with sand, earth or vermiculite. Prevent run-off into drains, water ways and soil. If contamination of sewers or waterways has occurred, advise the local emergency services.

Use appropriate personal protective measures (section 8) and keep area well ventilated. Be wary of confined spaces and fumes given off.

Never return spills to the original container for reuse.

7. HANDLING & STORAGE

7.1 Handling Advice: Use in well ventilated areas or use appropriate respirator if unable to do so. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor. Wash thoroughly after handling. Avoid release to the environment. Do not eat, smoke or drink around the area where it is handled.

For PPE see section 8

If any history of asthma, respiratory disease, skin sensitization or pregnant should not be employed to handle this product.

Do not handle unless all safety precautions have been read and understood.

Empty containers contain residue which can be hazardous. Do not reuse container.

7.2 Storage Advice: Store in original container closed tightly. Store away from sunlight in a dry, cool and well-ventilated area away from incompatible materials. See Section 10. Do not store in an unlabelled container.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.4 Occupational Exposure Limits: National Occupational Exposure Standard (NES), Safe Work Australia (formerly ASCC/NOHSC).

Diethylenetriamine 111-40-0 TWA 4.2mg/m³

8.5 Engineering Control Measures: Ensure ventilation is adequate to maintain air quality. Use with local exhaust ventilation and mechanical ventilation, wear an air purifying respirator if not able to do so.

8.6 Personal Protective Equipment:

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, APPROVED AIR RESPIRATOR.

Avoid eye contact by wearing chemical goggles with side-shields or face-shield (AS/NZS 1336) whenever exposed to vapour or mist or if there is a risk of splashing liquid in the eyes. Safety showers with eyewash should be provided in all areas where product is handled.

Protective clothing (gloves, coveralls, boots, etc.) should be worn to prevent skin contact. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using. Contaminated clothing should not leave the workplace.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical State:	Liquid
Colour:	Light
Odour:	Amine
Solubility:	Not available
Density	0.97
Flash Point (°C):	93.4°C
Boiling Point (°C)	222°C
Vapour Density (Air=1)	Not available

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10. STABILITY & REACTIVITY

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Heat and ignition sources. Strong oxidisers

Hazardous Reactions: Hazardous polymerisation will not occur under normal conditions.

Incompatible Materials: Will react with strong oxidizing agents, acids, alkalis and aliphatic amines.

Hazardous Decomposition: None produced under normal storage and use.

11. TOXICOLOGY INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Toxicity:

Phenol, 4-Nonyl, Branched

LD50 Oral Rat 1300mg/kg

N-(aminoethyl)piperazine

LD50 Oral Rat >1000mg/kg

LD50 Dermal Rabbit 866mg/kg

Diethylenetriamine

LD50 Oral Rat 1080mg/kg

Ld50 Dermal Rat 675mg/kg

LD50 Dermal Rabbit 1090mg/kg

Ingestion: Causes severe burns to the mouth, throat and stomach.

Eye Contact: Causes serious eye damage.

Skin Contact: Causes severe burns. May cause an allergic skin reaction.

Inhalation: Can be irritating or corrosive to the respiratory system. May cause allergy or asthma symptoms or breathing difficulties. Serious effects may be delayed following exposure.

Chronic Exposure: May cause damage to organs through prolonged or repeated exposure. Once sensitized an allergic reaction may occur with exposure to very low levels.

Carcinogen: No known effect

Mutagenicity: No known effects

Reproductive Toxicity: Suspected of damaging the unborn child. Suspected of damaging fertility

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12. ECOLOGICAL INFORMATION

Ecotoxicity:

4-nonylphenol, branched	Acute LC50 0.13825mg/L Fresh water	Fish, Flathead minnow	96H
	Acute LC50 0.1351mg/L Fresh water	Fish, Bluegill	96H
	Acute EC50 0.33mg/L Fresh water	Aquatic plants, Green algae	72H
2-piperazin-1- ylethylamine	Acute LC50 2190mg/L Fresh water	Fish, Flathead minnow	96H
2,2-iminodiethylamine	Acute LC50 16mg/L	Aquatic invertebrates, Daphnia	48H
	Acute LC50 0.535mg/L Fresh water	Aquatic invertebrates, Water flea	48H
	Acute EC50 1164mg/L	Aquatic Plants, Green algae	72H
	Acute EC50 345.6mg/L	Aquatic Plants – Green Algae	96H

Degradability: No data

Bio accumulative Potential:

Ingredient	LogPow	BCF	Potential
Phenol	5.4	2.4	Low
N-(aminoethyl)piperazine	-1.48	-	Low
Diethylenetriamine	-1.3	0.65 2.80	Low

Mobility in Soil: No Data

13 DISPOSAL CONSIDERATIONS

Waste should be minimised.

Care should be taken in handling emptied containers.

Product must be contained and not disposed to the sewerage systems, drains or waterways.

Dispose of in accordance with Local/State/Commonwealth regulations.

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14. TRANSPORT INFORMATION

14.3 Road and Rail Transport: ADG

UN: 3082

Packing Group: III

Class: 9

14.4 Marine Transport: IMDG

UN: 3082

Packing Group: III

Class: 9

14.3 Air Transport: IATA

UN: 3082

Packing Group: III

Class: 9

15. REGULATORY INFORMATION

Australian Dangerous Goods Code, No. 6 [National Road Transport Commission]

Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]

ASNZS 1715/16 Respiratory protective devices.

Safe Work Australia

IATA

IMDG

NES

16. OTHER INFORMATION

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Gemcuts Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. If clarification or further information is needed, the user should contact Gemcuts Pty Ltd at the contact details on page 1.

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