

ADHESIVE TECHNOLOGIES NZ LTD. **Safety Data Sheet**

PRODUCT NAME: ADR230

ISSUE DATE: 19/03/2021 **REVISION:** 2.1

1. Product and Company Identification

Product Name	ATL Epoxy Resin ADR 230		
Product Code	ADR230		
Recommended uses	Construction of fibre reinforced equipment and fittings. Suitable for construction of recreational water craft. Corrosion resistant flooring and coatings.		
Company	Adhesive Technologies NZ ltd		
Street Address	17 Corban Avenue Henderson Auckland		
Telephone	+64 9 838 6961		
Emergency	National Poisons Centre	Other Countries	New Zealand Fire Service-
Contact numbers	0800 764 766 (0800 POISON)	0064 3 479 7248	111

2. Hazards Identification

HSNO Classification

6.1D	Acutely toxic (oral, dermal, inhalation)
6.3A	Irritating to the skin
6.4A	Irritating to the eyes
6.5B	Contact sensitisers
9.1B	Very ecotoxic in the aquatic environment

Signal Word: WARNING

GHS Classification

Acute toxicity: Skin	Category 4
Acute toxicity: Oral	Category 4
Acute toxicity: Inhalation	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Aquatic toxicity (Chronic)	Category 2

Hazard Symbols



Hazard statements

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P261	Do not breathe mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.

- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
- P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338 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.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P321 Specific treatment (see First Aid Measures below)
- P363 Wash contaminated clothing before reuse.
- P391 Collect spillage

Storage

No storage statements

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/Information on Ingredients

Chemical Name	CAS no.	Weight %
Bisphenol A/ epichlorohydrin resin	25085-99-8	60-80
Formaldehyde, polymer with (chloromethyl)oxirane and phenol	9003-36-5	0-10
Alkyl (C12, C14) glycidyl ether	68609-97-2	10-30
Other ingredients determined not to be hazardous		To 100

4. First Aid

- Inhalation** Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.
- Skin Contact** Remove contaminated clothing/shoes and wipe excess from skin. Flush skin with water. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. Contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed to prevent reuse.
- Eye contact** Flush eyes with plenty of water for 15 minutes while holding eyelids open. Get medical attention.
- Ingestion** Do not induce vomiting. Rinse mouth with water. Give plenty of water to drink.
- Treatment** Treat symptomatically

5. Fire-fighting Measures

- Extinguishing Media** Use water fog, foam, dry chemical or carbon dioxide.
- Extinguishing Media to Avoid** Do not use direct water stream. May spread fire
- Hazardous Combustion Products** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Phenolics. Carbon monoxide. Carbon dioxide.
- Unusual Fire and Explosion Hazards** Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is emitted when burned without sufficient oxygen.
- Fire Fighting Procedures** Clear fire area of all non-emergency personnel. Isolate fire and deny unnecessary entry. Cool fire exposed containers with water. Irritating fumes are released in fire situations. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Do not allow material or run-off to enter waterways. Stay upwind, keep out of low areas.

Fire-fighting equipment	Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location
HAZCHEM	3Z

6. Accidental Release Measures

General Precautions	Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.
Personal Precautions	Use cautious judgement when cleaning up spills. Shut off leaks, if possible without personal risk.
Environmental Precautions	Dike and Contain. Contain run-off and dispose of properly. Remove contaminated soil to remove contaminated trace residues. Prevent from entering into drains, ditches or rivers.
Clean-up Methods (small)	Soak up with an absorbent material such as clay, sand, sawdust or Zorball. Place in non-leaking container. Seal tightly for proper disposal.
Clean-up Methods (large)	Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent material such as clay, sand, sawdust or Zorball. Place in non-leaking container. Seal tightly for proper disposal. Flush are with water to remove trace residue.

7. Handling and Storage

Handling	Keep out of reach of children. Put on appropriate PPE (see section 8). Causes skin irritation and sensitivity. Avoid contact with skin, eyes and clothing. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Do not breathe vapour or mist. Clean up spilled material immediately, and wash clothes, equipment and work area after use.
Storage	Store in a cool, dry place with adequate ventilation. Keep containers closed when not in use.

8. Exposure Controls / Personal Protection

Workplace Exposure Standards	None established
Engineering controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants as low as possible and/or below any recommended or statutory limits. Use explosion-proof ventilation equipment.
Personal Protection	Respiratory - Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Skin - Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Eye - Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Hand - Recommended: polyvinyl alcohol (PVA), Butyl rubber, EVAL, Neoprene.

9. Physical and Chemical Properties

Appearance	Liquid
Colour	Pale blue
Odour	Sweet odour
pH	≈ 5
Vapour pressure	82 Pa (4.5 mm Hg)
Vapour density	>1 [Air = 1]
Boiling Point	Not available
Melting/Freezing Point	Not available
Solubility (water)	Not Miscible
Specific Gravity/Density	1.16 g/cm ³ [25°C (77°F)]
Flash Point	251°C (closed cup)
Flammable Limits	LFL: Not available UFL: Not available
Auto-ignition	>300°C

10. Stability and Reactivity

Chemical Stability	Stable under recommended storage conditions.
Conditions to avoid	Avoid temperatures above 300°C. Potentially violent decomposition can occur, causing gas generation and pressure increases in closed systems.
Materials to avoid	Reactive or incompatible with the following materials: <i>oxidizing materials</i> Slightly reactive or incompatible with the following materials: <i>acids, amines, anhydrides, chloroform, chloroform acid.</i>
Hazardous Decomposition Products	Decomposition products may include the following materials: carbon oxides, phenolics and water.

11. Toxicological Information**Potential Health effects**

Inhalation	Vapours are unlikely due to physical properties.
Ingestion	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
Skin	Prolonged or repeated contact may cause skin irritation.
Eye	May cause eye irritation. Corneal injury is unlikely.

Acute Health Effects

(Bisphenol A/ epichlorohydrin resin)

Test	Species	Result	Exposure
LD50 Oral	Rat	>5000mg/kg	-
LD50 Dermal	Rabbit	20,000mg/kg	-

Systemic Effects	Except for Skin sensitization, repeated exposure is not likely to cause significant adverse effects.
Carcinogenicity	IARC has classified DGE BPA as non-carcinogenic.
Mutagenicity	In animal studies, did not cause birth defects or other adverse effects on the foetus when pregnant rabbits, did not interfere with reproduction. Animal genetic toxicity studies were negative.

12. Ecological Information

(Bisphenol A/ epichlorohydrin resin)

Ecotoxicity Material is moderately toxic to aquatic organisms on an acute basis

	Species	Period	Result
LC50	fathead minnow	96 h	3.1 mg/l
EC50	water flea	48 h	1.4 - 1.7 mg/
IC50	bacteria	18 h	> 42.6 mg/l

Degradability Under OECD guidelines this material cannot be considered as readily degradable.**Bioaccumulation** Moderate
Log P_{ow} = 3 - 5**HSNO** 9.1B Very ecotoxic in the aquatic environment**Classification****13. Disposal Considerations****Disposal***DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER.* All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations.*FOR UNUSED AND UNCONTAMINATED PRODUCT,* the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other destruction device.**14. Transport Information****Road, Rail, Sea and Air Transport**

UN Number	UN3082
Proper Shipping name	Environmentally hazardous substance, liquid, n.o.s. (Epoxy resin mixture)
DG Class	9
Packing Group	III
HAZCHEM code	3Z
IMO/IMDG class	9
ICAO/IATA class	9
EMS code	F – A, S – F
Marine pollutant	Yes

15. Regulatory Information**ERMA NZ Approval code** HSR002670**16. Other Information**

FOR FURTHER PRODUCT INFORMATION CALL ADHESIVE TECHNOLOGIES NZ LTD DURING BUSINESS HOURS

Product Information Manager (+64) 9 838 6961*The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in text.*