Material Safety Data Sheet

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GENERAL PURPOSE EPOXY HARDENER

ABL (STEVENS) Resin & Glass
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1. Identification of the product and the company.

Substance or preparation trade name: GENERAL PURPOSE EPOXY HARDENER
Unique reference numbers(s):
Company/undertaking name & address: As above

Telephone: 01270 766685
Emergency telephone number:

2. Information on ingredients

Substance Name	Value	CAS No	Symbol	R-Phrases
Benzyl alcohol	25%	100-51-6	Xn	R20/22
Paratertarybutylphenol	20%	98-54-4	XI	R36/37/38
Benzene-1.3-dimethanamine	15%	1477-55-0	C	R20/22/35
Trimethylhexamethylenediamine	10%	25620-58-0	C	R22/34/43/52/53

3. Hazards Identification

Risk phrases: May cause sensitization by skin contact.
Environmental hazard: Harmful to aquatic organisms may cause long term adverse effects in aquatic environment.
Primary route of exposure:
Symptoms relating to use:

- Inhalation: Inhalation of vapours/mists or aerosols may severly damage contacted tissue and produce scarring. Dryness of nasal passages may be experienced when material is inhaled over long period of time. There may be a feeling of tightness in the chest with shortness of breath.
- Skin contact: Contact with skin may cause dryness (defatting), itching and or rash. Product is absorbed through skin and may cause nausea, headache and general discomfort. Repeated or prolonged exposure may cause allergic reaction/sensitization.
- Eye contact: Product vapour in low concentrations can cause lacrimation, conjunctivitis and corneal edemna when absorbed in the tissue of the eye from the atmosphere. Burns to the eye may cause blindness. Contact of diluted product with the eyes or skin quickly causes severe irritation and pain and may cause burns, necrosis and permanent injury.
- Ingestion: severe ingestion hazard, sore throat, burning sensation, abdominal pain.

4. First aid measures

Inhalation:	Remove casualty from exposure ensuring ones own safety whilst doing so, if conscious ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. If unconscious check for breathing and apply respiration if necessary, if unconscious and breathing is normal place in recovery position. Transfer to hospital as soon as possible.
Skin contact:	Remove all items of clothing and footwear unless stuck to skin. Drench the affected area with plenty of water for 10 minutes or longer if material still on skin. Transfer to hospital if there are symptoms of burns
or	poisoning. DO NOT APPLY GREASE OR OINTMENTS.
Eye contact:	Rinse immediately with plenty of water for 15 minutes. Contact ophthalmologist immediately.
Ingestion:	If conscious give 1 pint of water and drink immediately. If unconscious check for breathing and apply artificial respiration if needed. Transfer to hospital as soon as possible. If conscious and
breathing OK place	in recovery position do not induce vomiting. If substance swallowed is corrosive, give 1 cup of
water to	drink every 10 minutes.

5. Fire fighting measures

Suitable extinguishing media:	In case of large fire: water spray. Alcohol or polymer foam, in case of small fire carbon dioxide, dry chemical powder dry sand or limestone.
Exposure hazards:	May generate toxic, irritating or flammable combustion products. In combustion emits toxic fumes of nitrogen oxides. Contact of liquid with skin must be prevented. May generate carbon monoxide and ammonia gas. A sudden reaction and fire may result if product is mixed with and oxidizing agent. Personnel in the vicinity and downwind should be evacuated.
Protection of firefighters:	wear self- contained breathing apparatus. Wear protective clothing to prevent
contact	with skin and eyes. A face shield should be worn. Retain expended liquids from fire fighting for later disposal.
Special procedures:	Exercise caution when fighting any chemical fire.

6. Accidental release measures

Personal precautions:	Spill should be handled by trained personnel properly equipped with respiratory and eye protection.
Environmental precautions:	Notify authorities if liquid enters sewers or public waters. Prevent entry to sewers and public waters.
Methods for cleaning:	Clean up any spills as soon as possible, using an absorbent material to collect it, use suitable disposable containers

7. Handling and storage

Precautions in handling and storage:	avoid all unnecessary exposure.
Storage:	provide local exhaust or general room ventilation to minimize dust and/or vapour concentrations. Where exposure through inhalation may occur from use, approved repiratory equipment is recommended. Keep container closed when not in use. Do not store in corrodible metal. Product must be stored at temperatures above 40ºF, keep from freezing.
Storage away from:	Acids
Handling:	Handle in accordance with good industrial hygiene and safety procedures. Ensure prompt removal from skin eyes and clothing. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

8. Exposure Controls / Personal protection

Engineering measures:	Ensure there is sufficient ventilation of the area.
Respiratory protection:	Not required under normal conditions in a well ventilated workplace. Self-contained breathing apparatus must be available in case of emergency.
Hand protection:	Neoprene gloves. Impermeable gloves. Butyl gloves. PVC gloves. Nitrile gloves. The breakthrough time of the selected gloves(s) must be greater than the intended use period.
Eye protection:	Face-shield- Goggles giving complete protection to eyes and eyewash bottle with clean water.
Skin protection:	Protective clothing with elasticated cuffs and closed neck. Boots made of PVC.

9. Physical and chemical properties

State:	Liquid
Colour:	Pale yellow
Odour:	Perceptible odour
Oxidising:	Non-oxidising (by EC criteria)
Solubility in water:	Moderate (1-10%)
Boiling point/range°C:	>200.00
Melting point/range°C:	No data
Flash poinfC:	> 100.00(closed cup)
Part.coeff. n-octanol/water	No data
Autoflammability°C:	No data
Vapour pressure:	mm Hg @ 21C-10.34
Relative density:	0.99
pH:	Alkaline

10. Stability and reactivity

Stability:	Stable under normal conditions.
Materials to avoid:	Strong mineral acids Organic Acids Oxidising agents. Reactive metals Sodium or Calcium Hypochlorite. CAUTION ! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres
with	high nitrous oxide concentrations. Product slowly corrodes copper, aluminium, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Materials reactive with hydroxyl compounds. Nitrites,
nitrosating	agents. A reaction accompanied by large heat release occurs when the product is
mixed with	acids.could cause vigorous boiling creating a hazard due to spashing of hot material.
Haz. decomp. products:	Nitrogen oxide can react with water vapours to form corrosive nitric acid. In combustion emits toxic fumes of carbon dioxide and carbon monoxide. Ammonia when heated. In combustion emits toxic fumes of nitrogen oxides. Irritating and toxic fumes at elevated temperatures. Nitric acid in a fire. Nitrosamines. Aldehydes. The oxides of nitrogen gases (except nitrous oxide) emitted on decomposition are highly toxic.

11. Toxicological information

Effects of exposure:	Component has caused allergic sensitization in animals.
Routes of exposure:	May cause sensitisation by inhalation. May cause sensitisation by skin contact.
Ingredient 1:	ORL RAT LD50 1230mg/kg

12. Ecological information

Ecological effects information:	No data
LC50-96 Hour-fish (mg/l)	No data
48 hour-EC50-Daphnia magna (mg/l)	No data

13 Disposal Considerations

Waste disposal:	Disposal should be dealt with only by qualified personnel familiar with the specific substance. Wear protective clothing during disposal operations. If disposal is by a waste contractor, *make* sure that he has sufficient information and that waste containers are properly labelled.
Disposal of packaging:	Arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. Transport information

ADR / RID

UN no:	2735
ADR Class:	8
Hazard ID no:	80
Labelling:	8
Shipping name:	AMINES. LIQUID. CORROSIVE. N.O.S

IMDG / IMO

UN no:	2753
Class:	8
Package group:	11
EmS:	8-05
Marine pollutant:	YES
Labelling:	8

IATA / ICAO

Un no:	2735
Class:	8
Package group:	11
Packing instructions:	812
Quantity:	301
Labelling:	8

15. Regulatory information

Symbols:	Corrosive
Risk Phrases:	R52.53 Harmful to aquatic organisms. May cause long term adverse effects in the aquatic environment. R43: May cause sensitization by skin contact. R34: Causes burns.
R20/22 Harmful	by inhalation and if swallowed.
Safety Phrases:	S26 In case of contact with eyes rinse immediately with plenty of water and seek medical
advise.	S36/37/39: wear suitable protective clothing, gloves and eye face protection.
	S61: Avoid release to the environment. Refer to special instructions safety data sheets.
	S45: In case of accident or if you feel unwell, seek medical advise immediately (show label where possible).

16. Other Information

Recommendations/restrictions: None

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