

# SAFETY DATA SHEETS (SDS)

## Enviro Ultra Tuff Part B



Hazard Identifiers

Version: 3

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### SECTION 1 – IDENTIFICATION OF MATERIAL & SUPPLIER

- 1.1 Product Name:** Enviro Ultra Tuff Part B  
**Manufacturer's Product Code:** N/A
- 1.2 Recommended Use:** Part B of a two component (plus colour pack), epoxy coating
- 1.3 Company:** Envirosystems Technologies Pty Ltd  
**Address:** 295 Princes Highway St Peters, NSW 2044.  
**Website:** www.envirosystems.com.au  
**Telephone:** +61 2 85958699 (business hours)  
**Fax:** +61 2 85958660
- 1.4 Emergency Telephone:** Info Safe – 1800 638 556, Poisons Centre – 131126
- Other Information:** All information in this SDS is to the best of our knowledge at time of publication. Users of this product should fully review this SDS prior to use to ensure best safety practices. Further information and or clarification can be obtained by contacting our technical department on the above telephone number.

### SECTION 2 – HAZARDS IDENTIFICATION

- 2.1 Hazard Classification:** Classified as **Hazardous** according to WHS Regulations, Australian GHS criteria and a **Dangerous Goods** according to the Australian Dangerous Goods Code.

Class	Category
Skin Corrosion/Irritation	1B
Serious eye damage/ irritation	1
Skin Sensitization	1

- 2.2 Label Elements**



Signal word

Danger

H-code	Hazard Statements
H314	Causes severe skin burns and eye damage
H317	May cause allergic skin reaction
P-Code	Precautionary Statement - Prevention
P260	Do Not breathe dust/ fume/ gas/ mist/ vapours/ spray
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P-Code	Precautionary Statement - Response
P308, P313	IF exposed or concerned: Get medical advice/attention
P363	Wash contaminated clothing before reuse.

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P305, P351, P338, P310	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P303, P361, P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P333, P313	If skin irritation or rash occurs: Get medical advice/ attention.
P304, P340	If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P301, P330, P331	If swallowed: Rinse mouth. Do not induce vomiting.
P370, P378	In case of fire: Use CO2, dry chemical, or foam for extinction
<b>P-Code</b>	<b>Precautionary Statement - Storage</b>
P405	Store locked up
P235, P403	Store in a cool well-ventilated area
<b>P-Code</b>	<b>Precautionary Statement - Disposal</b>
P501	Dispose of contents/ container to an approved waste disposal plant. In accordance with local regulation

### 2.3 Other Hazards

None known

## SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

See section below for Mixtures

### 3.2 Mixtures

CAS No.	Material	Content %
38294-64-3	Reaction products of 3-aminomethyl-3,5,5-trimethylcyclohexylamine and 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	25-50
100-51-6	Benzyl alcohol	25-50
1477-55-0	m-phenylenebis(methylamine)	5-10
69-72-7	Salicylic acid	<3

## SECTION 4 – FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General Advice:

Immediately remove contaminated clothing. If in danger of loss of consciousness, place patient in recovery position and transport accordingly. Apply artificial respiration if necessary. First aid personnel should pay attention to the own safety.

#### Ingestion:

IF SWALLOWED Transport to hospital, or doctor. For advice, contact a Poisons Information Centre or a doctor. In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition. If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist. If medical attention is not available on the worksite or

surroundings send the patient to a hospital together with a copy of the SDS.

**Inhalation:**

Keep patient calm and remove to fresh air. Transport to hospital, or doctor.

**Eye Contact:**

While holding eyes open, gently flood with plenty of fresh water for 15 minutes. Washing within one minute is essential to achieve maximum effectiveness. Immediate medical attention required. If pain persists or recurs also seek medical attention. Skilled personnel should only undertake removal of contact lenses after an eye injury.

**Skin Contact:**

Flush contacted area thoroughly with soap and plenty of water. Seek medical attention in event of irritation. Remove contaminated clothing including footwear.

- 4.2 Most important symptoms and effects, both acute and delayed** Any relevant information can be found in other parts of this section and in sections 2 and 11.
- 4.3 Advice for doctor** May cause sensitisation in susceptible persons. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be used unless the risk is justified by the presence of additional toxic substances..

## SECTION 5 – FIRE FIGHTING MEASURES

- 5.1 Extinguishing media** Suitable extinguishing media:  
Water fog or fine spray, dry chemical powder, foam, BCF (where regulations permit). Alcohols resistant foams are preferred. Protein foams may functions but will be less effective.
- Unsuitable extinguishing media that may not be used for safety reasons:  
Do not use direct water stream as it might spread the fire.
- 5.2 Special hazards arising from the substance or mixture** Oxides of carbon and other possibly toxic fumes from fire.
- 5.3 Advice for firefighters** Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include carbon dioxide (CO<sub>2</sub>), phenolics products typical of burning organic material. Closed containers may rupture due to pressure buildup under fire conditions.
- Hazchem code:** 3Y

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures** Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. If material is released indicate risk of slipping. Do not walk through spilled material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback.
- 6.2 Environmental precautions** Do not discharge into sewers or waterways and soil.

- 6.3 Methods and material for containment and cleaning up** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.
- 6.4 Reference to other sections** Relevant information in other sections has to be considered. This applies in particular for information given on personal protective equipment (section 8) and on disposal (section 13).

**SECTION 7 – HANDLING & STORAGE**

- 7.1 Precautions for safe handling** Ensure thorough ventilation of stores and work areas. Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Protection against fire and explosion: The product is flammable. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.
- 7.2 Conditions for safe storage** **Storage Requirements:**  
 Store in a cool, dry and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e. pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store away from strong acids, strong bases and strong oxidising agents.  
**Temperature Conditions:**  
 Up to 40° C  
**Protection from weather:**  
 Store undercover and away from frost and moisture
- 7.3 Specific end use(s)** Once mixed with part A and applied, produces a hard wearing, durable surface suitable for commercial and industrial applications.
- 7.4 Regulations and standards (Australia):** Classified as Hazardous Liquid which should be stored and handled in accordance with regulations

**SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION**

- 8.1 Control parameters** Exposure limits Australia
- | Ingredient          | WES                  |  |
|---------------------|----------------------|--|
| 2-Methylpropan-1-ol | 0.1mg/m <sup>3</sup> |  |
- 8.2 Exposure controls** **General protection and hygiene measures:**  
 General ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations. Do not eat, drink or smoke when handling. Wash hands at the end of work and before eating. Keep working clothes separately. Remove contaminated, soaked clothing immediately. Clean work areas regularly.  
**Personal protection equipment:**  
*Respiratory protection*  
 A/P2 Filter of sufficient capacity if ventilation is inadequate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent). When there is a potential to exceed exposure limits or guidelines a positive pressure full face respirator should be worn. If there are no applicable limits, wear respiratory protection when adverse effects like irritation or discomfort have been experienced or when indicated by you risk assessment process.

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### *Eye protection*

Chemical goggles. Full face respiratory may be required if exposure causes discomfort.

### *Hand protection*

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

Recommended thickness of the material:  $\geq 0.5$  mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

### *Skin protection*

Overalls clothing, P.V.C. apron.

### *Other Information*

Wash hands before smoking, eating, drinking or using the toilet and after finishing work. Observe the usual precautions when handling chemicals.

### 8.3 Further information for system design and engineering measures

Ventilation is recommended under normal use conditions. State regulations on speed and direction of airflow away from operators must be observed. Keep containers closed when not in use.

## SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

9.1	<b>Odour:</b>	Ammoniacal odour
	<b>Odour Threshold</b>	Not determined
	<b>Colour:</b>	Yellowish
	<b>Physical State:</b>	Fluid
	<b>Flash Point:</b>	101°C
	<b>Boiling Point:</b>	Not Available
	<b>Melting Point:</b>	Not Available
	<b>Specific Gravity:</b>	1.05 g/cm <sup>3</sup>
	<b>pH:</b>	Not Available
	<b>Solubility in Water (g/L):</b>	Not miscible
	<b>Flammability:</b>	N/A
	<b>Explosion Lower Limit:</b>	1.2 Vol %
	<b>Explosion Higher Limit:</b>	13.0 Vol %
	<b>Vapour Pressure:</b>	0.1 hPa at 20 oC
	<b>Vapour Density (Air = 1)</b>	Not determined
9.2	<b>Other information</b>	None available

## SECTION 10 – STABILITY AND REACTIVITY

10.1	<b>Reactivity; Chemical stability;</b>	If stored and handled in accordance with standard industrial practices not hazardous reactions are known. Unstable in the present of incompatible material.
-3	<b>Possibility of hazardous reactions</b>	
10.4	<b>Conditions to avoid</b>	Heat, flames and sparks.
10.5	<b>Incompatible materials</b>	Keep away from oxidizing agents, acids and alkalis.

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### 10.6 Hazardous decomposition products

Oxides of carbon and other possibly toxic fumes from fire.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Acute Toxicity/Effects

#### 100-51-6 Benzyl alcohol:

*Acute oral toxicity*  
LD50 1,230 mg/kg (rat)

*Acute Dermal toxicity*  
LD50 2000 mg/kg (rabbit)

**1477-55-0 m-phenylenebis(methylamine)** *Acute oral toxicity*  
LD50 930 mg/kg (rat)

*Acute Dermal toxicity*  
LD50 > 3100 mg/kg (rabbit)

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*Skin corrosion/irritation*  
Caustic effect on skin and mucous membranes.

*Serious eye damage/eye irritation*  
Strong caustic effect. Risk of serious damage to eyes.

*Respiratory or skin sensitisation*  
May cause sensitisation by skin contact.

### Chronic Toxicity/Effects

#### Enviro Ultra Tuff part B:

*Specific target organ systematic toxicity (single exposure)*  
No information available.

*Specific target organ systematic toxicity (repeated exposure)*  
No information available.

*Genetic toxicity*  
No information available.

*Carcinogenicity*  
No information available.

*Reproductive toxicity*  
No information available.

*Teratogenicity*  
No information available.

*Aspiration Hazard*  
No information available.

### Long Term Effects:

No information available.

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Toxicity</b>	<p><b>38294-64-3 Reaction products of 3- am inomethyl-3,5,5 trimethylcyclohexylamine and 4,4'- Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane:</b> <i>Acute toxicity to aquatic invertebrates</i> 11.1 mg/l (Daphnia) LC50(96h)</p> <p><i>Acute toxicity to algae/aquatic plants</i> 79.4 mg/l (algae) ErC50(72h)</p> <p><b>100-51-6 Benzyl alcohol</b> <i>Acute toxicity in fish</i> 646 mg/L (leuciscus idus) LC50 96 h</p> <p><i>Acute toxicity to aquatic invertebrates</i> 400 mg/l (Daphnia)</p> <p><i>Acute toxicity to algae/aquatic plants</i> 640 mg/l (algae) ErC50(96h)</p> <p><b>1477-55-0 m-phenylenebis(methylamine)</b> <i>Acute toxicity in fish</i> 87.6 mg/L (leuciscus idus) LC50 96 h</p> <p><i>Acute toxicity to aquatic invertebrates</i> 15.2 mg/l (Daphnia) LC50(48h)</p> <p><i>Acute toxicity to algae/aquatic plants</i> 20.3 mg/l (algae) ErC50(72h)</p>
<b>Microorganisms/Effect on sludge</b>	No information available.
<b>Persistence and degradability</b>	No information available.
<b>Bioaccumulative potential</b>	No information available.
<b>Mobility in soil</b>	No information available.
<b>Additional Information</b>	Do NOT discharge into sewer or waterways. Harmful to fish

## SECTION 13 – DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Material Recommendation:**

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

**Uncleaned packaging Recommendation:**

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

## SECTION 14 – TRANSPORT INFORMATION

### Transport Information

Classified as a Dangerous Good according to the Australian Code for the Transportation of Dangerous Goods by Road and Rail.

U.N. Number: 2735  
DG Class: 8  
EPG card: N/A  
Hazchem Code: 3Y  
Proper Shipping Name: POLYAMINES, LIQUID, COROSIVE,  
N.O.S. (Epoxide resin hardener)  
Packing Group: III

### Classification for SEA transport (IMO-IMDG)

U.N. Number: 2735  
DG Class: 8  
Proper Shipping Name: POLYAMINES, LIQUID, COROSIVE,  
N.O.S. (Epoxide resin hardener)  
Packing Group: III  
Marine Pollutant: No  
EmS-No F-A, S-B

### Classification for AIR transport (IATA/ICAO)

U.N. Number: 2735  
DG Class: 8  
Proper Shipping Name: POLYAMINES, LIQUID, COROSIVE,  
N.O.S. (Epoxide resin hardener)  
Packing Group: III

### Label



## SECTION 15 – REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National and local regulations must be observed. For information on labeling please refer to section 2 of this document.

**Poisons Schedule Number: N/A**

### Australian Inventory: Controlled Schedule Carcinogenic Substances:

Listed  
Not listed substances

## SECTION 16 – OTHER INFORMATION

Safety Data Sheets are updated regularly. Please ensure you have a current copy. SDS can be obtained from our website: [www.envirosystems.com.au](http://www.envirosystems.com.au)  
The SDS should be used to assist in the Risk Management. Many other factors determine whether the reported Hazards are risks in any given workplace.  
Specific Risks may be determined by reference to various Exposure Scenarios, Scale of use, Frequency of use and current or available engineering controls must be considered.



# **SAFETY DATA SHEETS (SDS)**

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Emergency Telephone: Info Safe – 1800 638 556, Poisons Centre – 13112