



# EpiMax MATERIAL SAFETY DATA SHEET

Product Name **EPIMAX 444 HARDENER**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Supplier Name** EPIMAX TECHNOLOGIES PTY LTD  
**Address** 4/3 Moorebank Avenue, Moorebank, NSW, AUSTRALIA, 2170  
**Telephone** 1300 721 522  
**Fax** (02) 9904 3207  
**Emergency** 1300 721 522  
**Synonym(s)** 444HARDENER • 5044410 - PRODUCT CODE  
**Use(s)** TWO PART EPOXY RESIN COMPOSITION. USE WITH EPIMAX 444 COMPOUND  
**SDS Date** 24/02/12

## 2. HAZARDS IDENTIFICATION

### RISK PHRASES

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

### SAFETY PHRASES

S24/25 Avoid contact with skin and eyes  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S28 After contact with skin, wash immediately with plenty of warm soapy water  
S36/37/39 Wear suitable protective clothing, gloves and eye face protection  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

<b>UN No.</b>	1760	<b>DG CLASS</b>	8	<b>Subsidiary Risk(s)</b>	None Allocated
<b>Packing Group</b>	III	<b>Hazchem Code</b>	2X		

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

<b>Ingredient</b>	<b>Formula</b>	<b>CAS NO.</b>	<b>Content</b>
AMINE	NOT AVAILABLE	002855-13-2	> 60%
OTHER NON-SCHEDULED	NOT AVAILABLE	FREE	TO 100%

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#### **4. FIRST AID MEASURES**

<b>Eye</b>	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
<b>Inhalation</b>	If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Airline respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.
<b>Skin</b>	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
<b>Ingestion</b>	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
<b>Special Treatment</b>	Treat symptomatically.

#### **5. FIRE FIGHTING MEASURES**

<b>Special Hazards</b>	Combustible. May evolve toxic gases (carbon oxides, phenols, hydrocarbons) when heated to decomposition. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, heaters, naked lights, pilot lights, mobile phones etc. when handling. Earth containers when dispensing fluids.
<b>Advice for firefighters</b>	Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
<b>Extinguishing Media</b>	Dry agent, carbon dioxide or water fog. Prevent contamination of drains or waterways
<b>Hazchem Code</b>	2X

#### **6. ACCIDENTAL RELEASE MEASURES**

<b>Spillage</b>	Contact emergency services where appropriate. Use personal protective equipment. Clear area of all unprotected personnel. Ventilate area where possible. Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all ignition sources.
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#### **7. STORAGE AND HANDLING**

<b>Storage</b>	Store tightly sealed in a cool, dry, well ventilated area, removed from oxidising agents, acids, alkalis, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should be bunded and have appropriate fire protection and ventilation systems.
<b>Precautions for safe handling</b>	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS

<b>Exposure Stds</b>	None allocated
<b>Biological Limits</b>	No biological limit allocated.
<b>Engineering Controls</b>	Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.
<b>PPE</b>	Wear splash-proof goggles, nitrile or viton (R) gloves, coveralls and a Type A (Organic vapour) respirator. If sanding dry product, wear: a Class P1 (Particulate) respirator. If spraying, with prolonged use, or if in confined areas, wear: impervious coveralls and an Air-line respirator.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	PALE YELLOW LIQUID	<b>Solubility (water)</b>	INSOLUBLE
<b>Odour</b>	SLIGHTLY AMMONIACAL	<b>Specific Gravity</b>	0.99
<b>pH</b>	NOT AVAILABLE	<b>% Volatiles</b>	<1%
<b>Vapour Pressure</b>	NOT DETERMINED	<b>Flammability</b>	NOT AVAILABLE
<b>Vapour Density</b>	NOT AVAILABLE	<b>Flash Point</b>	100°C
<b>Boiling Point</b>	NOT DETERMINED	<b>Upper Explosion Limit</b>	NOT AVAILABLE
<b>Melting Point</b>	NOT AVAILABLE	<b>Lower Explosion Limit</b>	NOT AVAILABLE
<b>Evaporation Rate</b>	NOT AVAILABLE		
<b>Autoignition Rate</b>	NOT AVAILABLE	<b>Decomposition Temperature</b>	NOT AVAILABLE
<b>Partition Coefficient</b>	NOT AVAILABLE	<b>Viscosity</b>	NOT AVAILABLE

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under recommended conditions of storage.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources.
<b>Material to avoid</b>	Incompatible with oxidising agents (eg. hypochlorites), acids (eg. nitric acid), alkalis (eg. hydroxides), heat and ignition sources.
<b>Hazardous Decomposition Products</b>	May evolve toxic gases (carbon oxides, phenols, hydrocarbons) when heated to decomposition.
<b>Hazardous Reactions</b>	Hazardous polymerization is not expected to occur.

## 11. TOXICOLOGICAL INFORMATION

<b>Health hazard summary</b>	Corrosive. This product has the potential to cause adverse health effects. Use safe work practices to avoid eye or skin contact and inhalation. Potential sensitising agent. Individuals with pre-existing respiratory impairment (eg asthmatics) or skin sensitivities may be more susceptible to adverse health effects.
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**Eye** Corrosive - irritant. Contact may result in irritation, lacrimation, pain, redness, corneal burns and possible permanent damage.

**Inhalation** Corrosive. Over exposure may result in irritation of the nose and throat, coughing, burning sensation, nausea and dizziness. May cause sensitisation by inhalation. High level exposure may result in breathing difficulties, ulceration, pulmonary oedema and unconsciousness.

**Skin** Corrosive. Will cause severe irritation and burns. Contact may result in irritation, redness, pain, rash, dermatitis and possible burns. May cause sensitisation by skin contact.

**Ingestion** Corrosive. Ingestion may result in burns to the mouth and throat, nausea, vomiting, ulceration of the gastrointestinal tract, breathing difficulties, circulatory collapse and coma.

**Toxicity Data** There is no toxicological information available for this product.

**12. ECOLOGICAL INFORMATION**

**Other adverse effects** Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal** Mix parts A + B together (small amounts), absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Ensure protective equipment is worn when mixing. Do not seal containers/tins until reaction is complete. Contact the manufacturer for additional information. Prevent contamination of drains or waterways as environmental damage may result.

**Legislation** Dispose of in accordance with relevant local legislation.

**14. TRANSPORT INFORMATION**



**CLASSIFIED AS A DANGEROUS GOOD THE CRITERIA OF THE ADG CODE**

<b>Shipping Name</b>	CORROSIVE LIQUID N.O.S				
<b>UN No.</b>	1760	<b>DG CLASS</b>	8	<b>Subsidiary Risk(s)</b>	NONE ALLOCATED
<b>Packing Group</b>	III	<b>Hazchem Code</b>	2X	<b>GTEPG</b>	NONE ALLOCATED

**IATA**

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**IMDG**

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## 15. REGULATORY INFORMATION

**Poison Schedule** Classified as a Schedule 5 (S5) Poison using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

**AICS** All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

## 16. OTHER INFORMATION

**Additional information** This product is used in conjunction with EpiMax 444 Compound.

**WELDING - SANDING - CUTTING DRIED OR CURED PRODUCT:** If sanding, cutting or welding dried or cured product, adverse health effects may be avoided by the use of appropriate engineering controls and/or personal protective equipment. If welding, wear a Class P2 (Metal fume) respirator and depending on the nature of the surface being welded, additional protection (eg. for organic vapours/acid gas) may also be required. A Class P1 (Particulate) respirator is recommended if dust is generated.

**RESPIRATORS:** In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

### ABBREVIATIONS:

ACGIH - American Conference of Industrial Hygienists.

ADG - Australian Dangerous Goods.

BEI - Biological Exposure Indice(s).

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

CNS - Central Nervous System.

EC No - European Community Number.

HSNO - Hazardous Substances and New Organisms.

IARC - International Agency for Research on Cancer.

mg/m<sup>3</sup> - Milligrams per Cubic Metre.

NOS - Not Otherwise Specified.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

PPM - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

STEL - Short Term Exposure Limit.

SWA - Safe Work Australia.

TWA - Time Weighted Average.