

Material Safety Data Sheet

Revision Date: 08/12
Version 2.0

Print Date: 08/21/12
MSDS Identification: 3300 Fast Cure Patch Kit PtB Epoxy Curing Agent

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : 3300 Fast Cure Patch Kit - Part B

Product Use Description : Epoxy Curing Agent

Company : Protective Floorings and Linings
A Division of Milamar Coatings, LLC
311 N.W. 122nd St, Suite 100
Oklahoma City, OK 73114

Telephone : 405-755-8448

Emergency Telephone Number: ChemTel 800-255-3924 or 813-248-0585 (International)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS Number	Concentration (Weight)
Aminoethyl Piperazine, 1-(2-, (AEP))	140-31-8	< 40%
Phenol, 4,4'-(1-methylethylethylidene)bis-	80-05-7	>30%
Nonylphenol	25154-52-3	>20%
Benzyl alcohol	100-51-6	>5%
Benzyltrimethylamine	103-83-3	<5%

Chemical Family: Aliphatic Amines

3. HAZARDS INFORMATION

Emergency Overview

Toxic in contact with skin.
Harmful if swallowed
Components of the product may affect the nervous system.
Reproductive toxin.
Severe skin irritant.
Severe eye irritant.
May cause sensitization by skin contact.

Potential Health Effects

Inhalation : May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure.

Eye Contact : Severe eye irritation.

Skin Contact : Toxic in contact with skin. If absorbed through the skin, may cause central

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		nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties.
Ingestion	:	Harmful if swallowed. May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure.
Chronic Health Hazard	:	This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Reproductive Toxin. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas. Sub chronic exposure of this material or component in test animals has caused abnormalities in the following organ(s): Kidney. Liver. Respiratory system.
Exposure Guidelines		
Target Organs	:	Skin. Eyes. Reproductive hazard. Kidney Liver Central nervous system.
Aggravated Medical Condition	:	Neurological disorders, Liver disorders, Kidney disorders, Skin disorders and Allergies. Eye disease, Repeated and / or prolonged exposures may result in : Blood chemistry changes (such as methemoglobinemia leading to cyanosis or loss of consciousness).

4. FIRST AID MEASURES

General Advice	:	Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be initiated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately
Eye Contact	:	Rinse immediately with plenty of water also under the eyelids for at least 20 minutes. Remove contact lenses.
Skin Contact	:	Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Wash off immediately with plenty of water for at least 20 minutes. Cover wound with sterile dressing. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.
Ingestion	:	Prevent aspiration of vomit. Turn victim's head to the side. Never give anything by mouth to an unconscious person.
Inhalation	:	Move to fresh air.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	:	Alcohol-resistant foam.
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Carbon Dioxide (CO₂).
Dry Chemical.
Dry Sand.
Limestone Powder.

Specific Hazards	:	May generate ammonia gas. May generate toxic nitrogen oxide gases. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes. Downwind personnel must be evacuated. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses.
Special Protective Equipment For Fire Fighters	:	Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.
Further information	:	Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	:	Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye / face protection. Evacuate personnel to safe areas.
Environmental Precautions	:	Construct a dike to prevent spreading.
Methods For Clean-Up	:	Contact Protective Floorings and Linings for advice. Place in appropriate chemical waste container.
Additional Advice	:	If possible, stop flow of product.

7. HANDLING AND STORAGE

Handling	:	Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Use personal protective equipment. When using, do not eat, drink or smoke.
Storage	:	Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.
Technical Measures / Precautions	:	Do not store in reactive metal containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures	:	Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.
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Personal Protective Equipment

Respiratory Protection	:	Not required for properly ventilated areas.
Hand Protection	:	Neoprene gloves. Butyl-rubber gloves. Nitrile Rubber. Impervious Gloves. PVC disposable gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.
Eye Protection	:	Chemical resistant goggles must be worn.
Skin And Body Protection	:	Long sleeve shirts and trousers without cuffs. Impervious Clothing
Environmental Exposure Controls	:	Construct a dike to prevent spreading.
Special Instructions For Protection And Hygiene	:	Discard contaminated leather articles. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Provide readily accessible eye wash stations and safety showers. Wash at the end of each work shift and before eating, smoking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Liquid.
Color	:	Amber.
Odor	:	Ammoniacal.
Relative Density	:	1.05 (water = 1).
Density	:	65.549 lb/ft ³ (1.05 g/cm ³) at 70 degrees F (21 degrees C)
pH	:	Alkaline.
Boiling Point / Range	:	> 392 degrees F (.200 degrees C)
Flash Point	:	230 degrees F (110 degrees C)
Water Solubility	:	Slightly Soluble

10. STABILITY AND REACTIVITY

Stability	:	Stable under normal conditions.
Materials To Avoid	:	Organic acids (i.e. acetic acid, citric acid etc.). Mineral Acids. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.

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Sodium Hypochlorite
Reactive metals (e.g. sodium, calcium, zinc etc.).
Reaction with peroxides may result in violent decomposition of peroxide.
Materials reactive with hydroxyl compounds.
Oxidizing agents.

Hazardous Decomposition Products : Nitric Acid.
Ammonia.
Nitrogen oxides (NOx).
Nitrogen oxide can react with water vapors to form corrosive nitric acid.
Carbon Monoxide (CO).
Carbon Dioxide (CO2)
Aldehydes.
Nitrosamine.

11. TOXICOLOGICAL INFORMATION

Acute Health Hazard

Ingestion : LD 50 : >500 mg/kg
Species: Rat
Method: estimated

Inhalation : No data is available on the product itself.

 Components
 Benzyl Alcohol LC50 (4 h) :>4.178mg/l Species : Rat
 Benzyl dimethylamine LC50 (4 h):373 ppm Species : Rat

Skin : No data is available on the product itself.

 Components
Aminoethyl Piperazine, 1-(2-, (AEP) LD50 : 880mg/kg Species : Rabbit
Phenol, 4,4'-(1-methylethylidene)bis- LD50 : 3600mg/kg Species : Rabbit
 Nonylphenol LD50 : 2033mg/kg Species : Rabbit
 Benzyl Alcohol LD50 : 2000mg/kg Species : Rabbit

Eye Irritation / Corrosion : Severe eye irritation.

Acute Dermal Irritation / Corrosion : Severe skin irritation.

Chronic Health Sensitization : The product or a component may be mutagenic, the data is inconclusive. Rats exposed orally to 800 mg/kg benzyl alcohol for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No Observed Adverse Effect Level (NOAEL) was 400 mg/kg. No evidence of carcinogenicity was seen in a two-year study with rats and mice. May impair fertility. Information given is based on data on the components and the toxicity of similar products.

12. ECOLOGICAL INFORMATION

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Ecotoxicity Effects

Aquatic Toxicity	:	No data is available on the product itself.	
Toxicity to fish - Components			
Nonylphenol	:	LC50 (96h) : 0.128 mg/l	Species: fathead minnow (Pimephales promelas).
Benzyl Alcohol	:	LC50 (96h) : 10 mg/l	Species: Bluegill sunfish (Lepomis macrochirus).
Benzyl Alcohol	:	LC50 (96h) : 460mg/l	Species: fathead minnow (Pimephales promelas).
Toxicity to daphnia - Components			
Nonylphenol	:	EC50 (48 h) :0.0848 mg/l	Species : Daphnia
Nonylphenol	:	EC50 (48 h) : 0.19mg/l	Species : Daphnia
Toxicity to algae - Components			
Benzyl Alcohol	:	IC50 (72 h) : 700 mg/l	Apecies : Algae.
Toxicity to other organisms	:	No data available.	

Persistence And Degradability

Mobility	:	No data available.	
Bioaccumulation	:	No data available on the product itself.	
Bioaccumulation - Components			
Nonylphenol		Moderate bioaccumulation potential.	
Benzyl Alcohol		Low bioaccumulation potential.	

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products	:	Contact supplier if guidance is required.
Contaminated Packaging	:	Dispose of container and unused contents in accordance with federal, state, and local requirements.

14. TRANSPORT INFORMATION

CFR		
Proper Shipping Name	:	Amines, liquid, corrosive, n.o.s. (Aminoethyl) piperazine, 1-(2-, (AEP), Nonylphenol)
Class	:	8
UN / ID No.	:	UN2735
Packing Group	:	III
		Emergency Response Guide Book Number 153
		Note: Shipped as Consumer Commodity ORM-D in packaging having a rated capacity gross weight of 30kg (66lb.) or less (49CFR 173.154(c)).
IATA		
Proper Shipping Name	:	Amines, liquid, corrosive, n.o.s. (Aminoethyl) piperazine, 1-(2-, (AEP), Nonylphenol)

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	UN / ID No.	:	UN2735
	Packing Group	:	III
IMDG	Proper Shipping Name	:	Amines, liquid, corrosive, n.o.s. (Aminoethyl) piperazine, 1-(2-, (AEP), Nonylphenol)
	Class	:	8
	UN / ID No.	:	UN2735
	Packing Group	:	III
CTC	Proper Shipping Name	:	Amines, liquid, corrosive, n.o.s. (Aminoethyl) piperazine, 1-(2-, (AEP), Nonylphenol)
	Class	:	8
	UN / ID No.	:	UN2735
	Packing Group	:	III

15. REGULATORY INFORMATION

Country	Regulatory List	Notification
USA	TSCA	Included on Inventory
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.
Canada	DSL	Included on Inventory.
Australia	AICS	Included on Inventory.
Japan	ENCS	Included on Inventory.
South Korea	ECL	Included on Inventory.
China	SEPA	Included on Inventory.
Philippines	PICCS	Included on Inventory.

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level: Phenol, 4,4'-(1-methylethylidene)bis-

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65):
This product does not contain any chemical known to the State of California to cause cancer, birth defects or any other harm.

WHMIS Hazard Classification: Toxic Material Causing Other Toxic Effects, Very Toxic Material Causing Other Toxic Effects, Toxic Material causing Other Toxic Effects, Corrosive material.

16. OTHER INFORMATION

HMIS Rating		
Health	:	3
Flammability	:	1
Physical Hazard	:	0
Prepared By	:	Protective Floorings and Linings. EH&S Product Safety Department