

Material Safety Data Sheet

Revision Date: 07/16/04
Version 2.0

Print Date: 08/03/05
MSDS Identification: 2300LS Liner - Part B Epoxy Curing Agent

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : 2300LS Liner - Part B
Product Use Description : Epoxy Curing Agent
Company : Protective Floorings and Linings, Inc
2009 Enterprise Drive
De Pere, WI 54115
Telephone : 920-403-7979
Emergency Telephone Number : INFOTRAC 800-535-5053

2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS Number	Concentration (Weight)
Benzyl Alcohol	100-51-6	< 45 %
Benzene-1,3-dimethanamine (MXDA)	1477-55-0	< 20%

Chemical Family: Aliphatic Amine

3. HAZARDS INFORMATION

Emergency Overview

Harmful if swallowed.
Corrosive.
Keep away from heat and sources of ignition.
Severe respiratory irritant.
Severe skin irritant.
Severe eye irritant.
May cause sensitization by skin contact.

Potential Health Effects

Inhalation : Inhalation of aerosol may cause irritation to the upper respiratory tract. Risk of serious damage to the lungs (by inhalation). May cause nose, throat, and lung irritation. Can cause severe eye, skin and respiratory tract burns. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Eye Contact : Product vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema can cause the perception of "blue haze" or "fog" around lights although this is a temporary effect and has no known residual effect. Causes eye burns. May cause blindness. Severe eye irritation.

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Skin Contact	:	Causes skin burns.
Ingestion	:	Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.
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. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas.
Exposure Guidelines Target Organs	:	Respiratory system. Skin. Eyes.
Aggravated Medical Condition	:	Asthma. Adverse respiratory effects (such as cough, tightness of chest or shortness of breath. Eye disease, Skin disorders and Allergies. Adverse skin effects (such as rash, irritation or corrosion). Adverse eye effects (such as conjunctivitis or corneal damage).

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	:	If a person vomits when lying on his back, place him in the recovery position. Prevent aspiration of vomit. Turn victim's head to the side.
Inhalation	:	If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	:	Alcohol-resistant foam. Carbon Dioxide (CO2). Dry Chemical. Dry Sand. Limestone Powder.
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- Specific Hazards : May generate ammonia gas. May generate toxic nitrogen oxide gases. Incomplete combustion may form carbon monoxide. Ammonia gas may be liberated at high temperatures. In case of incomplete combustion an increased formation of oxides of nitrogen. (NOx) is to be expected. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes.
- 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
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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.
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7. HANDLING AND STORAGE

- Handling : Avoid contact with skin and eyes. 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 : 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.
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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.
- Personal Protective Equipment
- Respiratory Protection : Wear appropriate respirator when ventilation is inadequate
- Hand Protection : Neoprene gloves.

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PVC Disposable Gloves.
Nitrile Rubber.
Impervious Gloves.
The breakthrough time of the selected glove(s) must be greater than the intended use period.

Eye Protection : Full face shield with goggles underneath.
Chemical resistant goggles must be worn.

Skin And Body Protection : Slicker Suit.
Impervious Clothing.
Full Rubber Suit (rain gear).
Rubber or Plastic Boots.
Long sleeve shirts and trousers without cuffs.

Environmental Exposure Controls : Construct a dike to prevent spreading.

Special Instructions For Protection And Hygiene : Discard contaminated leather articles. 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.

Exposure Limit(s)

	Ceiling Limit Value: ACGIH	Ceiling Limit Value and Time Period (if specified): NIOSH
Benzene-1,3-dimethaneamine (MXDA)	0.1 mg/m ³	0.1 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid.

Color : Light Yellow.

Odor : Amine-like.

Relative Density : 1.1 (water = 1).

Density : 68.671 lb/ft³ (1.04g/cm³) at 70 degrees (21 degrees C)

pH : > 11.

Boiling Point / Range : 225 degrees F (107.22 degrees C)

Flash Point : > 235 degrees F (112.78 degrees C)

Water Solubility : Slightly Soluble.

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.

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Materials To Avoid : Organic acids (i.e. acetic acid, citric acid etc.).
Mineral Acids.
Reactive metals (e.g. sodium, calcium, zinc etc.).
Materials reactive with hydroxyl compounds.
Oxidizing agents.

Hazardous Decomposition Products

In case of fire hazardous decomposition products may be produced such as:

Carbon Monoxide.
Carbon Dioxide (CO₂).
Nitrogen oxides (NO_x).
Nitrogen oxide can react with water vapors to form corrosive nitric acid.
Ammonia.
Aldehydes.

11. TOXICOLOGICAL INFORMATION

Acute Health Hazard

Ingestion : LD 50: >1,230 mg/kg
Species: Rat

Inhalation : No data is available on the product itself.

Skin : No data is available on the product itself.

Eye Irritation / Corrosion : Severe eye irritation.

Acute Dermal Irritation / Corrosion : Severe skin irritation.

Skin Sensitization : May cause sensitization by skin contact.

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

Aquatic Toxicity : No data is available on the product itself.

Toxicity To Fish - Components

Benzyl Alcohol : LC50(96 h):10mg/l Species: Bluegill sunfish (*lepomis macrochirus*).

Benzyl Alcohol : LC50(96 h):460mg/l Species: Fathead minnow (*pimephales promelas*)

Toxicity To Algae - Components

Benzyl Alcohol : IC50(72 h):700mg/l Species: Algae

Toxicity To Other Organisms : No data available.

Persistence And Degradability

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Mobility : No data available.
Bioaccumulation : No data is available on the product itself.
Bioaccumulation - Components
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. (Benzene-1,3-dimethaneamine (mxda))
Class : 8
UN / ID No. : UN2735
Packing Group : III

IATA

Proper Shipping Name : Amines, liquid, corrosive, n.o.s. (Benzene-1,3-dimethaneamine (mxda))
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Packing Group : III

IMDG

Proper Shipping Name : AMINES, LIQUID, CORROSIVE, N.O.S. (Benzene-1,3-dimethaneamine(mxda))
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CTC

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Packing Group : III

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard : Corrosive. Sensitizer.
(29 CFR 1910.1200) Hazard Class(es)

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

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		longer polymer.
Canada	DSL	Not on Inventory. Notifications have been submitted to Environment Canada.
Australia	AICS	Included on Inventory
Japan	ENCS	Included on Inventory
South Korea	ECL	Included on Inventory
China	SEPA	Not on Inventory.
Philippines	PICCS	Not on Inventory.

EPA SARA Title III Section 312 (40 CFR 370) Hazard Communication: Acute Health Hazard

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level: None

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, Corrosive Material.

16. OTHER INFORMATION

HMIS Rating

Health : 3
Flammability : 1
Physical Hazard : 1

Prepared By : Protective Floorings and Linings, Inc. EH&S Product Safety Department