

Material Safety Data Sheet

Revision Date: 1-Mar-09 Print Date: 03/11/09
 Version 3.0 MSDS Identification: 1100CS - Part B Epoxy Curing Agent

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : 1100CS - 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

| Hazardous Ingredients 1 | % Wt. | Symbol | CAS No. | EC No. | R-phrases |
|---|-------|--------|-----------|-----------|-------------------|
| 3-Aminomethyl-1-3,5,5-trimethylcyclohexylamir | 25-35 | C | 2855-13-2 | 220-666-8 | 21/22-34-43-52/53 |
| Benzyl Alcohol | 30-50 | Xn | 100-51-6 | 202-859-9 | 20/22 |
| m-Xylene-alpha, alpha'-Diamine | 15-30 | C | 1477-55-0 | 216-032-5 | 20/22-35-43-52/53 |
| 2-Hydroxybenzoic Acid | 8-Feb | Xn | 69-72-9 | 200-712-3 | 22-36/38 |

3. HAZARDS INFORMATION

Emergency Overview
 Harmful if swallowed.
 Corrosive.
 Keep away from heat and sources of ignition.
 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. Can cause severe eye, skin and respiratory tract burns.

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.

Skin Contact : Causes skin burns.

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| | | |
|------------------------------|---|---|
| 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 | : | Skin. Eyes |
| Aggravated Medical Condition | : | 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 | : | Prevent aspiration of vomit. Turn victim's head to the side. |
| Inhalation | : | Move to fresh air. |

5. FIRE-FIGHTING MEASURES

| | | |
|------------------------------|---|---|
| Suitable Extinguishing Media | : | Alcohol-resistant foam. 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. 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. |

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Special Protective Equipment For Fire Fighter : 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 : 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 : 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.

Personal Protective Equipment

Respiratory Protection : Not required for properly ventilated areas.

Hand Protection : Neoprene gloves.
PVC Disposable Gloves.
Butyl-rubber gloves.
Nitrile Rubber.
Impervious Gloves.
The breakthrough time of the selected glove(s) must be greater than the intended use period.

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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.

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 |
|---|------------------------------|---|
| 3-Aminomethyl-3,5,5-trimethylcyclohexylamine m-Phenylenebis(methylamine) | 0.1 mg/m ³ (skin) | 0.1 mg/m ³ (skin) |
| Benzene-1,3-dimethaneamine (MXDA) | 0.1 mg/m ³ | 0.1 mg/m ³ |

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid.

Color : Amber

Relative Density : 1.04 (water = 1).

Density : 64.925 lb/ft³ (1.04g/cm³) at 70 degrees (21 degrees C).

pH : not applicable.

Boiling Point / Range : > 392 degrees F (200 degrees C).

Flash Point : 230 degrees F (110 degrees C).

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.
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:

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

11. TOXICOLOGICAL INFORMATION

Acute Health Hazard

| | | |
|-------------------------------------|---|--|
| Ingestion | : | LD 50: >1,752 mg/kg Species: Rat Method: Estimated |
| 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. |

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 (Iepomis 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

| | | |
|-----------------|---|---|
| Mobility | : | No data available. |
| Bioaccumulation | : | No data is available on the product itself. |

Bioaccumulation - Components

| | | |
|----------------|---|--------------------------------|
| Benzyl Alcohol | : | Low bioaccumulation potential. |
|----------------|---|--------------------------------|

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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 : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CYCLOALIPHATIC AMINE ADDUCT)
Class : 8
UN / ID No. : 3267
Packing Group : III

IATA

Proper Shipping Name : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CYCLOALIPHATIC AMINE ADDUCT)
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IMDG

Proper Shipping Name : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CYCLOALIPHATIC AMINE ADDUCT)
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Packing Group : III

CTC

Proper Shipping Name : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CYCLOALIPHATIC AMINE ADDUCT)
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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 longer polymer. |
| Canada | DSL | Not on Inventory. Notifications have been submitted to Environment Canada. |
| Australia | AICS | Not on Inventory. |
| Japan | ENCS | Not on Inventory. |
| South Korea | ECL | Not on Inventory. |
| China | SEPA | Not on Inventory. |
| Philippines | PICCS | Not on Inventory. |

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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.

WHMIS Trade Secret Registry Number(s): 5027 Filing Date 03/27/2001.

| | | |
|--|---|---|
| Canadian Classification | : | E: Corrosive materials; D2B: Toxic materials causing other effects |
| Risk Phrase(s) | : | Causes severe burns. Harmful by inhalation, in contact with skin and if swallowed. May cause sensitisation by skin contact |
| Precautionary and First Aid Measure(s) | : | Wear suitable protective clothing, gloves and eye/face protection. Use only in well ventilated areas. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). |
| Other Information | : | DSL; Not on inventory. |

16. OTHER INFORMATION

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

¹ Classified according to: *29 CFR 1910,1200,1915,1916,1917
*Mass, right-to-know law(ch. 40,M.G.L.O 111F)
*Canadian WHMIS regulations
*67/548/EEC(29th Adaption) and 99/45EC
*Worksafe Austialia (NOHSC: 1008(1999))