1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Rhino Linings 55125 Curing Agent

Product Use Description : Curing Agent

Manufacturer/Importer/Distributor
Rhino Linings Corporation
9151 Rehco Road
San Diego, CA, 92121

Telephone : 858-450-0441 Corporate

Emergency telephone number (24h) : (CHEMTREC) 800-424-9300 USA

2. HAZARDS IDENTIFICATION

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

Potential Health Effects
Inhalation : Toxic by inhalation. Harmful if inhaled and may cause delayed lung injury. May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Eye contact : Severe eye irritation.

Skin contact : Harmful in contact with skin. If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Symptoms of overexposure may be headache, dizziness,
tiredness, nausea and vomiting.

**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. 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.
Central nervous system.

**Symptoms**

Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.

**Aggravated Medical Condition**

Neurological disorders Asthma. Skin disorders and Allergies. Eye disease

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>Concentration (Weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>&lt; 45 %</td>
</tr>
<tr>
<td>Benzene-1,3-dimethaneamine (MXDA)</td>
<td>1477-55-0</td>
<td>&lt; 20 %</td>
</tr>
</tbody>
</table>

CHEMICAL FAMILY: Aliphatic Amines.

### 4. FIRST AID MEASURES

**General advice**

Seek medical advice. 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.

**Eye contact**

Rinse immediately with plenty of water for at least 15 minutes.

**Skin contact**

Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

**Ingestion**

Never give anything by mouth to an unconscious person. 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
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. 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. 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 noxious 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.

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. Construct a dike to prevent spreading.

Methods for cleaning up: Approach suspected leak areas with caution. Contact Rhino Linings Emergency Response Center for advice. Place in appropriate chemical waste container.

Additional advice: Open enclosed spaces to outside atmosphere. Evacuate area and do not approach spilled product. 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 breathing vapors and/or aerosols. Avoid contact with eyes. Use only in well-ventilated areas. 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.
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.
- 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: 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. Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Provide readily accessible eye wash stations and safety showers.

Exposure limit(s)

<table>
<thead>
<tr>
<th>Compound</th>
<th>Value</th>
<th>Source</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Weighted Average (TWA): WEEL</td>
<td>10 ppm</td>
<td></td>
<td>44.20 mg/m3</td>
</tr>
<tr>
<td>Benzene-1,3-dimethaneamin e (MXDA)</td>
<td>Ceiling Limit Value: ACGIH</td>
<td>-</td>
<td>0.1 mg/m3</td>
</tr>
<tr>
<td>Benzene-1,3-dimethaneamin e (MXDA)</td>
<td>Ceiling Limit Value and Time Period (if specified): NIOSH</td>
<td>-</td>
<td>0.1 mg/m3</td>
</tr>
<tr>
<td>Benzene-1,3-dimethaneamin e (MXDA)</td>
<td>Ceiling Limit Value: OSHA Z1A</td>
<td>-</td>
<td>0.1 mg/m3</td>
</tr>
<tr>
<td>Benzene-1,3-dimethaneamin e (MXDA)</td>
<td>Ceiling Limit Value: US CA OEL</td>
<td>-</td>
<td>0.1 mg/m3</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid.
Material Safety Data Sheet

Color : Light yellow.
Odor : Amine-like.
Relative density : 1.1 (water = 1)
Vapor pressure : 7.50 mmHg at 70 °F (21 °C)
Density : 68.671 lb/ft³ (1.1 g/cm³) at 70 °F (21 °C)

pH : > 11
Boiling point/range : > 225 °F (> 107.22 °C)
Flash point : > 112.78 °C
Water solubility : Slightly soluble.
Viscosity : 200 - 350 mPa.s at 77 °F (25 °C)

10. STABILITY AND REACTIVITY

Chemical Stability : Stable under normal conditions.

Materials to avoid : Sodium hypochlorite.
                   Organic acids (i.e. acetic acid, citric acid etc.).
                   Mineral acids.
                   Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
                   Reaction with peroxides may result in violent decomposition of peroxide possibly
                   creating an explosion.
                   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).
                   Nitric acid.
                   Ammonia
                   Nitrogen oxides (NOx).
                   Nitrogen oxide can react with water vapors to form corrosive nitric acid.
                   Aldehydes
                   Flammable hydrocarbon fragments.

11. TOXICOLOGICAL INFORMATION

Acute Health Hazard
Ingestion : LD50 : > 1,230 mg/kg Species : Rat.

Inhalation : No data is available on the product itself.

Inhalation - Components
Benzyl alcohol LC50 (4 h) : > 4.178 mg/l Species : Rat.
OECD Test Guideline 403

Dermal : No data is available on the product itself.

Dermal - Components
Benzyl alcohol LD50 : 2,000 mg/kg Species : Rabbit.
Benzene-1,3-dimethaneamine (MXDA) LD50 : 2,000 mg/kg Species : Rabbit.

Eye irritation/corrosion : Severe eye irritation.

Skin irritation/corrosion : Destruction of skin tissue as a result of up to 4 hours exposure., Rabbit skin.
Corrosive in an in vitro test.

Sensitization : May cause sensitization by skin contact.

Chronic Health Hazard
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.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects
Aquatic toxicity : No data is available on the product itself.

Toxicity to fish - Components
Benzyl alcohol LC50 (96 h) : 10 mg/l Species : Bluegill sunfish (Lepomis macrochirus).

Benzyl alcohol LC50 (96 h) : 460 mg/l Species : Fathead minnow (Pimephales promelas).

Toxicity to algae - Components
Benzyl alcohol IC50 (72 h) : 700 mg/l Species : Algae.
Benzene-1,3-dimethaneamine (MXDA) EC50 (72 h) : 12 mg/l Species : Scenedesmus subspicatus

Toxicity to other organisms : No data available.

Persistence and degradability
Biodegradability : No data is available on the product itself.
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

**DOT**

- UN/ID No.: UN2735
- Proper shipping name: Amines, liquid, corrosive, n.o.s., (Aliphatic amine)
- Class or Division: 8
- Packing group: III
- Label(s): 8
- Marine Pollutant: No

**IATA**

- UN/ID No.: UN2735
- Proper shipping name: Amines, liquid, corrosive, n.o.s., (Aliphatic amine)
- Class or Division: 8
- Packing group: III
- Label(s): 8
- Marine Pollutant: Yes

**NOTE:** This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definition of toxic to the aquatic environment. For more information, contact an Rhino Linings customer service representative.

**IMDG**

- UN/ID No.: UN2735
- Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S., (Aliphatic amine)
- Class or Division: 8
- Packing group: III
- Label(s): 8
- Marine Pollutant: Yes

**NOTE:** This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definition of toxic to the aquatic environment. For more information, contact an Rhino Linings customer service representative.
TDG

UN/ID No. : UN2735
Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S., (Aliphatic amine)
Class or Division : 8
Packing group : III
Label(s) : 8
Marine Pollutant : No

Further Information
The transportation information is not intended to convey all specific regulatory data relating to this material. For complete transportation information, contact an Rhino Linings customer service representative.

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA) 12(b) Component(s):
None.

Corrosive. Sensitizer.

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulatory list</th>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>TSCA</td>
<td>Included on Inventory.</td>
</tr>
<tr>
<td>EU</td>
<td>EINECS</td>
<td>Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.</td>
</tr>
<tr>
<td>Canada</td>
<td>DSL</td>
<td>Included on Inventory.</td>
</tr>
<tr>
<td>Australia</td>
<td>AICS</td>
<td>Included on Inventory.</td>
</tr>
<tr>
<td>Japan</td>
<td>ENCS</td>
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<tr>
<td>South Korea</td>
<td>ECL</td>
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<tr>
<td>China</td>
<td>SEPA</td>
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</tr>
<tr>
<td>Philippines</td>
<td>PICCS</td>
<td>Included on Inventory.</td>
</tr>
</tbody>
</table>

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification
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 chemicals known to 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
Material Safety Data Sheet

HMIS Rating

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>3</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical hazard</td>
<td>1</td>
</tr>
</tbody>
</table>

Disclaimer: The data set forth in this sheet are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the aforementioned product. Rhino Linings USA, Inc. makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereof.