Material Safety Data Sheet: META-LOX (PART A)

Supersedes Date: 07/20/2010
Issuing Date: 05/15/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: META-LOX (PART A)
Recommended use: Patching compound
Information on Manufacturer:
CHEMSEARCH DIV. OF NCH CORP.
BOX 152170
IRVING, TX 75015

Product Code: R014
Chemical nature: Epoxy
Emergency Telephone Number:
CHEMTREC® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview
WARNING
May cause skin irritation
May cause eye irritation
May cause allergic skin reaction
May cause allergic respiratory reaction

Color: dark gray
Physical State: Liquid
Odor: Epoxy

Potential Health Effects
Principle Route of Exposure: Eye contact, Inhalation, Skin contact.
Primary Routes of Entry: Inhalation, Skin Absorption.

Acute Effects
- Eyes: May cause eye irritation.
- Skin: May cause skin irritation. May cause allergic skin reaction.
- Inhalation: May cause irritation of respiratory tract. May cause allergic respiratory reaction.

Chronic Toxicity: Health effects due to the inhalation of mineral dusts containing crystalline silica, crystalline silicates, graphite or coal. Prolonged or repeated inhalation may cause damage to the lungs. May cause sensitization by skin contact. May cause sensitization by inhalation. Contains a known or suspected carcinogen.

Target Organ Effects: Respiratory system, Kidney, Skin, Eyes, Spleen, Immune system.
Aggravated Medical Conditions: Skin disorders, Respiratory disorders, Kidney disorders, Liver disorders.
Potential Environmental Effects: See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl ether of bisphenol A</td>
<td>25085-99-8</td>
</tr>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>Treated fumed silica</td>
<td>67762-90-7</td>
</tr>
<tr>
<td>Bisphenol A - Epichlorohydrin polymer</td>
<td>25068-38-6</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General advice: Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Avoid breathing dust.
Eye Contact: Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
Skin Contact: Wipe up with absorbent material (e.g. cloth, fleece). Wash contaminated clothing before re-use. Get medical attention if irritation develops and persists. Wash off with soap and plenty of water.
Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion: Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention if symptoms occur.
Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point: > 201 °F / > 94 °C
Autoignition Temperature: No information available.
Flammability Limits in Air % Aluminum: Upper 12, Lower 2
Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Foam. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific hazards arising from the chemical material can create slippery conditions. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. 

**Protective Equipment and Precautions for Firefighters**

Protective equipment and precautions shall be as in any fire, as wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions**
Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

**Environmental Precautions**
Do not flush into surface water or sanitary sewer system.

**Methods for Containment**
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13)

**Methods for Cleaning Up**
Pick up and transfer to properly labeled containers.

**Neutralizing Agent**
Not applicable.

**7. HANDLING AND STORAGE**

**Handling**
Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Avoid breathing the dust.

**Storage**
Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

**Storage Temperature**
Minimum 35°F / 2°C, Maximum 120°F / 49°C

**Storage Conditions**
Indoor X Outdoor Heated Refrigerated

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl ether of bisphenol A</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)</td>
<td>TWA: 0.025 mg/m³ TWA (respirable fraction)</td>
<td>No data available</td>
<td>IDLH: 50 mg/m³ TWA: 0.05 mg/m³</td>
</tr>
<tr>
<td>Treated fumed silica</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Bisphenol A - Epichlorohydrin polymer</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Engineering Measures**
Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

**Personal Protective Equipment**

**Eye/Face Protection**
Safety glasses with side-shields.

**Skin Protection**
For prolonged or repeated contact, use protective gloves with appropriate chemical resistance.

**Respiratory Protection**
In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**General Hygiene Considerations**
Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Viscosity</th>
<th>Color</th>
<th>Odor</th>
<th>Appearance</th>
<th>pH</th>
<th>Specific Gravity</th>
<th>Percent Volatile (Volume)</th>
<th>VOC Content (g/L)</th>
<th>Vapor Density</th>
<th>Boiling Point/Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Semi-Solid</td>
<td>dark gray</td>
<td>Epoxy</td>
<td>Opaque</td>
<td>Not applicable</td>
<td>1.6</td>
<td>67.9</td>
<td>12</td>
<td>8.8 (Air = 1.0)</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**10. STABILITY AND REACTIVITY**

**Chemical Stability**
Stable. Hazardous polymerization does not occur.

**Conditions to Avoid**
None known.

**Incompatible Products**

**Hazardous Decomposition Products**
Carbon oxides, Nitrogen oxides (NOx), Aldehydes, Acidic fumes.

**Possibility of Hazardous Reactions**
None under normal processing.
11. TOXICOLOGICAL INFORMATION

Product Information
No information available.

Component Information

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
<th>Draize Test</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl ether of bisphenol A</td>
<td>&gt;15000 mg/kg (Rat)</td>
<td>23000 mg/kg (Rabbit)</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Aluminum</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)</td>
<td>500 mg/kg (Rat)</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Treated fumed silica</td>
<td>&gt;5000 mg/kg (Rat)</td>
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<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
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<tr>
<td>Bisphenol A - Epichlorohydrin polymer</td>
<td>11400 mg/kg (Rat)</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Mutagenicity</th>
<th>Sensitization</th>
<th>Developmental Toxicity</th>
<th>Reproductive Toxicity</th>
<th>Target Organ Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl ether of bisphenol A</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>eyes, respiratory system, skin</td>
</tr>
<tr>
<td>Aluminum</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>eyes, respiratory system (in animals: lung cancer), kidneys</td>
</tr>
<tr>
<td>Treated fumed silica</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Bisphenol A - Epichlorohydrin polymer</td>
<td>no data available</td>
<td>Skin sensitization</td>
<td>no data available</td>
<td>no data available</td>
<td>immune system</td>
</tr>
</tbody>
</table>

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl ether of bisphenol A</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>Aluminum</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)</td>
<td>A2</td>
<td>Group 1</td>
<td>Known</td>
<td>X</td>
<td>not applicable</td>
</tr>
<tr>
<td>Treated fumed silica</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>Bisphenol A - Epichlorohydrin polymer</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Product Information
No information available.

Component Information

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
<th>log Pow</th>
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</thead>
<tbody>
<tr>
<td>Diglycidyl ether of bisphenol A</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>N/A</td>
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<tr>
<td>Aluminum</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>N/A</td>
</tr>
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<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>N/A</td>
</tr>
<tr>
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<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>N/A</td>
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<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Persistence and Degradability
No information available.

Bioaccumulation
No information available.

Mobility
No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal
Dispose of in accordance with local regulations.

Container Disposal
Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT
Not regulated

TDG
Not regulated

ICAO
Not regulated

IATA
Not regulated
15. REGULATORY INFORMATION

Inventories
TSCA Complies
DSL Complies
U.S. Federal Regulations
SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>15-40</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Categorization

<table>
<thead>
<tr>
<th>Acute Health Hazard</th>
<th>Chronic Health Hazard</th>
<th>Fire Hazard</th>
<th>Sudden Release of Pressure Hazard</th>
<th>Reactive Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

CERCLA

<table>
<thead>
<tr>
<th>Component</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA EHS RQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl ether of bisphenol A</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Aluminum</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
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</table>

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

D2A Very toxic materials D2B Toxic materials

16. OTHER INFORMATION

Prepared By Angela Hutson
Supercedes Date 07/20/2010
Issuing Date 05/15/2013
Reason for Revision No information available.
Glossary No information available.
List of References No information available.

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