## Glasswall NR Coating System

<table>
<thead>
<tr>
<th>Proper Name</th>
<th>Use within System</th>
<th>Name on General MSDS List</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRP850 and WHP850</td>
<td>Epoxy resin and hardener for coating system</td>
<td>WRP850 and WHP850</td>
</tr>
</tbody>
</table>

Life Science Products  
124 Speer Road  
Chestertown, MD 21620  
Phone (800) 638-9874  
Fax: (410) 778-3625  
www.lspinc.com
1. Product Description

Basic use

SeamTek® Pigmented Epoxy Resin WP850 is a two component 100% solids, low-odor, low viscosity, low VOC resin that chemically cures to form a rigid and highly abrasion resistant binder for high performance interior wall systems. It has been specifically designed to exhibit excellent flow characteristics, air release, and workable viscosity.

This product is compatible with most aggregates used to achieve skid, impact or wear resistance. It may be used as seal or finish coat as well as a binder resin.

Features and benefits include:
- No amine blush – no frosting
- Self leveling
- Low foaming
- Excellent adhesion to concrete
- Good workability – easy to spread
- 100% solids – solvent free
- Low VOC
- Low odor
- Low flammability

The LSP SeamTek® systems are composed of resins and aggregates which utilize the best available technology for safety and performance. All products and systems are extensively field tested prior to use on SeamTek® projects.

Composition and Materials

SeamTek® Pigmented Epoxy Resin WP850 is a chemical curing, two component, 100% solids epoxy coating.

Sizes

The binder resin and hardener are packaged in 5 U.S. gallon (18.9 liter) pails.

Limitations

SeamTek® WP850 must not be used to bridge moving cracks or joints. Non-moving cracks or joints that must be over coated require rigid repairs. See LSP Technical Manual System Specifications for details. Surface or air temperature must be between 65°F minimum and 80°F maximum and relative humidity below 80%. Lower temperatures will extend cure time and higher temperatures will reduce pot and work life.

Storage and Handling

Because WP850 has a flash point above 200°F (93°C), transportation, storage and handling are less restricted. The binder resin is freeze/thaw stable, which allows flexibility in storage of the product, on or off site.

Product Health and Safety Information

Refer to container labels and Material Safety Data Sheets available from LSP for health, safety and environmental information. If necessary, call LSP at (800) 638-9874.

Applicable Standards

LSP SeamTek® Pigmented Epoxy Resin WP850 has been tested in accordance with American Society for Testing and Materials (ASTM) methods. Refer to Table 1 on page 1 for more information. SR101 can be used as a wall coating in food processing areas and other similar applications. The USDA and FDA no longer regulates coatings used on walls, walls, and ceilings in food process areas, since the surfaces are not intended for food contact.

<table>
<thead>
<tr>
<th>Property</th>
<th>Measuring Standards and Conditions</th>
<th>Results Part A/Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>ASTM D 70, Fisher #3-247 pycnometer</td>
<td>1.07</td>
</tr>
<tr>
<td>Weight</td>
<td>ASTM E 201</td>
<td>9.2 lbs./gal.</td>
</tr>
<tr>
<td>Non-volatile Content</td>
<td>ASTM D 1353, 18 hrs. at 200°F (93°C)</td>
<td>100%</td>
</tr>
<tr>
<td>Viscosity, cps</td>
<td>ASTM D 1475 77°F (25°C)</td>
<td>Self-leveling</td>
</tr>
<tr>
<td>Flash Point, TCC minimum</td>
<td>Seta Flash</td>
<td>Greater than 200°F (93°C)</td>
</tr>
<tr>
<td>Solvent Odor</td>
<td>ASTM D 1296</td>
<td>Extremely low</td>
</tr>
<tr>
<td>Pot Life</td>
<td></td>
<td>50 to 60 minutes at 72°F (22°C) &amp; 50% R.H.</td>
</tr>
</tbody>
</table>
Surface Preparatory Work
Preparatory work must be done in accordance with procedures described in LSP Technical Manual.

Mixing
Caution, Containers used to measure WP850 resin and Harder must be marked appropriately and only used to measure the indicated component. Container used to mix both resin and hardener must be cleaned or changed after mixing each batch to avoid residual material affecting viscosity and cure rates.

Measure both parts by volume 2 to 1 into square plastic marked containers. Pour resin and hardener into a separate container and agitate using a jiffy paddle and low speed drill (400-600 rpm). Agitate for 2 minutes, and then scrape sides of container and mix for an additional minute. Avoid generating air bubbles and foam. Consider mixing small batches to reduce potential waste. To avoid exothermic reaction in mixing container, do not let mixed components sit in container. Immediately, either trowel the mixed epoxy binder resin onto the wall to be coated or thoroughly mix with aggregate and then trowel onto wall. Spread or finish material according to application instructions contained in LSP Technical Manual.

3. Warranty
LSP Performance Resin Systems are installed by LSP Associate Contractors and are available with the LSP Single Source Limited Warranty for Labor and Material. This Product Data Sheet is for your information and is neither a contract nor a product warranty. Your installation contract is provided by your LSP Associate Contractor. LSP’s warranty to you is made solely in the LSP Single Source Limited Warranty for Labor and Material. Contact your Associate Contractor for the specific warranty document.

4. Maintenance
SeamTek® Systems are hard seamless surfaces that will provide years of life with little maintenance. For more detailed maintenance instructions, please request LSP Wall Maintenance Instructions. Periodic inspections by your LSP Associate Contractor are recommended to discuss ways to extend the life of the wall care.

5. Technical Service
Call your LSP representative for assistance.

Table 2 – Typical Performance Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Measuring Standards and Conditions</th>
<th>Binder Resin Results Only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>See Note 1 below</td>
</tr>
<tr>
<td>Drying time</td>
<td>ASTM D 1475 77°F (25°C)</td>
<td>To Touch: 8 to 12 hrs., max.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To complete: 24 hrs. max.</td>
</tr>
<tr>
<td>Hardness (indentation)</td>
<td>ASTM D 2240 Rex D Model 1700</td>
<td>65-70 resin only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>80-85 with aggregate</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D 638</td>
<td>Less than 0.1%</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D 638</td>
<td>4500 psi (31 MPa)</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>ASTM D 570-95</td>
<td>Less than 0.2%</td>
</tr>
<tr>
<td>Indentation Resistance</td>
<td>Mil. Std. D-3134</td>
<td>Zero</td>
</tr>
<tr>
<td>Water Vapor Transmission</td>
<td>ASTM E 96-94</td>
<td>Less than 0.10 U.S. perms</td>
</tr>
<tr>
<td>Weathering Resistance</td>
<td>ASTM G 26 Type B, BH, 300 hrs</td>
<td>Slight Yellowing</td>
</tr>
<tr>
<td>Abrasion Resistance</td>
<td>ASTM C 501, CS-17 Wheel, 1000 rev. with 1000 gram weight</td>
<td>Less than 0.1 grams weight loss</td>
</tr>
<tr>
<td>Bond Strength to Concrete</td>
<td>ASTM D 4541</td>
<td>350 to 500 psi (2.4 to 3.4 MPa) epoxy holder fails</td>
</tr>
<tr>
<td>Electrical Conductivity</td>
<td>ASTM D 635</td>
<td>Non conductive</td>
</tr>
<tr>
<td>Flammability</td>
<td>Self-Extinguishing</td>
<td></td>
</tr>
</tbody>
</table>

1. For additional performance properties for binder resin with aggregate added (i.e. Tensile Strength, Flexural Strength, Flexural Modulus, Compressive Strength, Coefficient of Linear Expansion, etc.) refer to LSP technical manual for specific system(s) selected.
SECTION 1 Product and Company Information

PRODUCT NAME: SeamTek® Wall Coating Hardener WHP850
GENERIC NAME: Cycloaliphatic diamine epoxy hardener
DISTRIBUTOR: LSP Performance Resins
124 Speer Road
Chestertown, MD 21620

Comments: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/ECC and Canadian Hazardous Products Act

SECTION 2 Hazards Identification

Emergency Overview

OSHA Hazardous
- Target Organ Effect: Skin Sensitizer, Irritant
- Target Organs: Respiratory, eyes, Skin
- Physical Appearance: Viscous liquid
- Immediate Concerns: Skin Irritation

Potential Health Effects
- Skin: Will cause irritation and dermatitis, repeated overexposure will cause dermatitis and sensitization. Sensitized persons may experience rapid irritation of skin upon exposure.
- Inhalation and Ingestion: Irritation to system

Carcinogenicity:
- Not listed by NTP
- Not Listed by IARC
- Not Listed by OSHA

Reproductive Toxicity
- Reproductive Effects: Not Available
- Teratogenic Effects: Not Available

Signs and Symptoms of Overexposure:
- Irritation of Skin

Medical Conditions Aggravated:
- Allergy, Skin Disorders

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

<table>
<thead>
<tr>
<th>Health</th>
<th>Environmental</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity, Oral</td>
<td>Category 5</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Skin Irritant</td>
<td>Category 2</td>
<td></td>
</tr>
<tr>
<td>Serious Eye Damage</td>
<td>Category 1</td>
<td></td>
</tr>
<tr>
<td>Skin Sensitization</td>
<td>Category 1</td>
<td></td>
</tr>
</tbody>
</table>

Pictogram:

Signal Word Danger

<table>
<thead>
<tr>
<th>Hazard Statements</th>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>H303 May be harmful if swallowed</td>
<td>P280 Wear protective gloves/protective clothing/eye protection/face protection</td>
</tr>
<tr>
<td>H315 Causes skin irritation</td>
<td>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td>H317 May cause an allergic skin reaction</td>
<td></td>
</tr>
<tr>
<td>H318 Causes serious eye damage</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3 Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
<th>Wt%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>25-40</td>
</tr>
<tr>
<td>Cycloaliphatic Diamine</td>
<td>2855-13-2</td>
<td>18-35</td>
</tr>
<tr>
<td>Polyoxypropylenediamine</td>
<td>9046-10-0</td>
<td>15-30</td>
</tr>
<tr>
<td>Propylene Glycol Monomethyl Ether (PM)</td>
<td>107-98-2</td>
<td>10-20</td>
</tr>
<tr>
<td>1,5 pentanediame, 2 methyl</td>
<td>15520-10-2</td>
<td>1-5</td>
</tr>
<tr>
<td>Amorphous Silicon Dioxide</td>
<td>7631-86-9</td>
<td>2-6</td>
</tr>
<tr>
<td>Salicylic acid</td>
<td>69-72-7</td>
<td>3-10</td>
</tr>
</tbody>
</table>
SECTION 4 First Aid Measures

**EYE CONTACT:** Get medical attention immediately. Immediately flush eyes gently with large amounts of water, holding lids open for at least 20-30 minutes, retracting eyelids often. Check for, and remove contact lenses.

**SKIN CONTACT:** Get medical attention immediately. Flush contaminated skin with plenty of WATER. Do NOT wash with solvents. Wash contaminated clothing thoroughly with water before removing it or wear gloves. Continue to rinse for at least 10 minutes. May cause irritation and allergic reaction. Seek medical advice if irritation develops or persists.

**INHALATION:** Move exposed person to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate make of self contained breathing apparatus. Keep person warm and at rest. If not breathing or breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing air to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

**INGESTION:** Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

**Advice to physicians:** Symptomatic and supportive therapy as needed. May aggravate skin conditions.

SECTION 5 Fire Fighting Measures

**Conditions of Flammability**
Not flammable or combustible

**Suitable Extinguishing Media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Hazardous Decomposition Products**
Hazardous decomposition products formed under fire conditions – Carbon Oxides

**Fire Fighting Instructions**
Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray/fog for cooling.

SECTION 6 Accidental Release Measures

**Personal Precautions**
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

**Environmental Precautions**
Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air.

**Methods and Materials for Containment and Cleaning Up**
Stop the leak if it can be done without risk. Move containers from the spill area. Prevent entry into sewers, water ways or soils. Contain and collect spillage with non-combustible, absorbent material such as sand, earth, vermiculite or diatomaceous earth. Place in container for disposal according to local regulations via a licensed waste disposal contractor. Contaminated absorbent materials may pose the same hazards as the spilled product. See section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7 Handling and Storage

**Precautions for Safe Handling** Can cause skin and eye irritation and allergic skin reaction.

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Conditions for Safe Storage
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do no store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8 Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Hazardous Component</th>
<th>PEL</th>
<th>STEL</th>
<th>TLV</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Cycloaliphatic Diamine</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Polyoxypolyolenediamine</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Propylene Glycol Monomethyl Ether (PM)</td>
<td>100 ppm</td>
<td>NE</td>
<td>100 ppm</td>
<td>NE</td>
</tr>
<tr>
<td>1,5-pentanediol, 2 methyl</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Amorphous Silicon Dioxide</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Salicylic acid</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>

ENGINEERING CONTROLS Use local exhaust ventilation to maintain airborne concentrations below exposure limits. Respiratory protection may be required in addition to general room ventilation.

PERSONAL PROTECTIVE EQUIPMENT Use a properly fitted, air-purifying or air supplied respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards or the product and the safe working limits of the selected respirator.

EYE PROTECTION Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

SKIN AND BODY PROTECTION When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene or rubber. Use of barrier cream is recommended. Clean equipment thoroughly after each use. Discard contaminated leather shoes and canvas sneakers.

OTHER HYgienic practices Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

SECTION 9 Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form</td>
<td>Slightly hazy</td>
</tr>
<tr>
<td>Color</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting/Freezing Temperature</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>100 F</td>
</tr>
<tr>
<td>Ignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Lower explosive limit; na</td>
<td>Upper explosive limit: na</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>12.6 mm Hg</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity (water=1 @39.2F)</td>
<td>&gt;1.01</td>
</tr>
<tr>
<td>Evaporation Rate (Bac=1)</td>
<td>None</td>
</tr>
<tr>
<td>Odor</td>
<td>amine</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
</tbody>
</table>
SECTION 10 Stability and Reactivity

Chemical Stability
Stable under recommended storage conditions

Possibility of Hazardous Reactions
No data available

Conditions to Avoid
Avoid strong acids, bases in bulk and elevated temperatures

Materials to Avoid
Reactive or incompatible with: acids, oxidizers, amines

Hazardous Decomposition Products
Decomposition products formed under fire conditions may include: Carbon oxides, Nitrogen oxides, Aldehydes.

SECTION 11 Toxicological Information

Acute Toxicity
- Oral LD50: Rat > 4000 mg/kg
- Dermal LD50: Rabbit 20,000 mg/kg
- Inhalation LC50: No data available

Skin Corrosion/Irritation
- Skin: Irritant

Serious Eye Damage/Eye Irritation
- Eye: Irritant
- Eyes: Rabbit
- Severe eye irritation – 24 H

Respiratory or Skin Sensitization
May cause skin or respiratory sensitization

Mutagenicity
- Mouse: Skin
- Carcinogenic by RTECS Criteria: liver, ovarian, thyroid

Carcinogenicity
- IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
- ACGIH: No component of this product presents at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by ACGIH
- NTP: No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

SECTION 12 Ecological Information

Aquatic Ecotoxicity
No data available

Biodegradability
- Persistent: Not readily biodegradable

Mobility in soil
No data available

SECTION 13 Disposal Considerations

Waste Disposal
The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residuals. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
SECTION 14  Transport Information

DOT (US)  
Not Regulated

IMDG  
Not Regulated

TDG  
Not Regulated

SECTION 15  Regulatory Information

TSCA INVENTORY STATUS  
All components are listed or exempt

OSHA HAZARDS  
Skin Sensitizer  
Irritant
Corrosive Material

HMIS Classification  
\[
\begin{array}{c|c|c}
& Health Hazard; & NFPA Rating \\
Flammability & 1 & 0 \\
Physical Hazards & 0 & 0 \\
\end{array}
\]

SARA TITLE III: Section 311/312 Hazard Class  
Acute Health Hazard, Chronic Health Hazard

SARA TITLE III: Section 313 (40CFR370)  
This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations

CERCLA Information (40CFR302.4)  
This material contains no hazardous or extremely hazardous substances at or above the de minimus concentrations as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:  
This product contains, no listed substances known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16  Other Information

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable. This MSDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Material Safety Data Sheet  WRP850

SECTION 1  Product and Company Information

PRODUCT NAME: SeamTek® Wall Coating Resin WRP850 (all colors)
GENERIC NAME: Pigmented Epoxy Resin
DISTRIBUTOR: LSP Performance Resins
124 Speer Road
Chestertown, MD 21620

Comments: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/ECC and Canadian Hazardous Products Act

SECTION 2  Hazards Identification

Emergency Overview
OSHA Hazardous
- Target Organ Effect: Skin Sensitizer, Irritant
- Target Organs: Respiratory, eyes, Skin
- Physical Appearance: Viscous liquid
- Immediate Concerns: Skin Irritation

Carcinogenicity: Not listed by NTP
Not Listed by IARC
Not Listed by OSHA

Potential Health Effects
Skin: Will cause irritation and dermatitis, repeated overexposure will cause dermatitis and sensitization. Sensitized persons may experience rapid irritation of skin upon exposure.
Inhalation and Ingestion: irritation to system

Reproductive Toxicity
Reproductive Effects: Not Available
Teratogenic Effects: Not Available

Signs and Symptoms of Overexposure:
Irritation of Skin

Medical Conditions Aggravated:
Allergy, Skin Disorders

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

<table>
<thead>
<tr>
<th>Health</th>
<th>Environmental</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity, Oral</td>
<td>Category 5</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Skin Irritant</td>
<td>Category 2</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Serious Eye Damage</td>
<td>Category 1</td>
<td></td>
</tr>
<tr>
<td>Skin Sensitization</td>
<td>Category 1</td>
<td></td>
</tr>
</tbody>
</table>

Pictogram:

Signal Word  Danger

<table>
<thead>
<tr>
<th>Hazard Statements</th>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>H303   May be harmful if swallowed</td>
<td>P280 Wear protective gloves/protective clothing/eye protection/face protection</td>
</tr>
<tr>
<td>H315   Causes skin irritation</td>
<td>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td>H317   May cause an allergic skin reaction</td>
<td></td>
</tr>
<tr>
<td>H318   Causes serious eye damage</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3  Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
<th>Wt%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl ether bisphenol A epoxy resin</td>
<td>25085-99-8</td>
<td>45-65</td>
</tr>
<tr>
<td>Aliphatic glycidyl ether diluents</td>
<td>68609-97-2</td>
<td>4-10</td>
</tr>
<tr>
<td>Rutile titanium dioxide</td>
<td>13463-67-7</td>
<td>4-30</td>
</tr>
<tr>
<td>Calcium carbonate</td>
<td>1317-65-3</td>
<td>3-8</td>
</tr>
<tr>
<td>Aluminum silicate</td>
<td>1332-58-7</td>
<td>0-2</td>
</tr>
<tr>
<td>Barium sulfate</td>
<td>7727-43-7</td>
<td>3-20</td>
</tr>
<tr>
<td>Inorganic iron oxides</td>
<td>1309-37-1</td>
<td>4-20</td>
</tr>
<tr>
<td>Chromium III trivalent chromium</td>
<td>1308-38-9</td>
<td>4-20</td>
</tr>
</tbody>
</table>
SECTION 4 First Aid Measures

**EYE CONTACT:** Get medical attention immediately. Immediately flush eyes gently with large amounts of water, holding lids open for at least 20-30 minutes, retracting eyelids often. Check for, and remove contact lenses.

**SKIN CONTACT:** Get medical attention immediately. Flush contaminated skin with plenty of WATER. Do NOT wash with solvents. Wash contaminated clothing thoroughly with water before removing it or wear gloves. Continue to rinse for at least 10 minutes. May cause irritation and allergic reaction. Seek medical advice if irritation develops or persists.

**INHALATION:** Move exposed person to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate make of self contained breathing apparatus. Keep person warm and at rest. If not breathing or breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing air to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

**INGESTION:** Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Advice to physicians: Symptomatic and supportive therapy as needed. May aggravate skin conditions.

SECTION 5 Fire Fighting Measures

**Conditions of Flammability**
- Not flammable or combustible

**Suitable Extinguishing Media**
- Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Hazardous Decomposition Products**
- Hazardous decomposition products formed under fire conditions – Carbon Oxides

**Fire Fighting Instructions**
- Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray/fog for cooling.

SECTION 6 Accidental Release Measures

**Personal Precautions**
- No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

**Environmental Precautions**
- Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air.

**Methods and Materials for Containment and Cleaning Up**
- Stop the leak if it can be done without risk. Move containers from the spill area. Prevent entry into sewers, water ways or soils. Contain and collect spillage with non-combustible, absorbent material such as sand, earth, vermiculite or diatomaceous earth. Place in container for disposal according to local regulations via a licensed waste disposal contractor. Contaminated absorbent materials may pose the same hazards as the spilled product. See section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7 Handling and Storage

**Precautions for Safe Handling**
- Can cause skin and eye irritation and allergic skin reaction.

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
**Conditions for Safe Storage**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**SECTION 8 Exposure Controls / Personal Protection**

**EXPOSURE GUIDELINES**

<table>
<thead>
<tr>
<th>Hazardous Component</th>
<th>PEL</th>
<th>STEL</th>
<th>TLV</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl ether bisphenol A epoxy resin</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Aliphatic glycidyl ether diluents</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Rutile titanium dioxide</td>
<td>10 mg/m³</td>
<td>NE</td>
<td>10 mg/m³</td>
<td>NE</td>
</tr>
<tr>
<td>Calcium carbonate</td>
<td>10 mg/m³</td>
<td>NE</td>
<td>10 mg/m³</td>
<td>NE</td>
</tr>
<tr>
<td>Aluminum silicate</td>
<td>10 mg/m³</td>
<td>NE</td>
<td>10 mg/m³</td>
<td>NE</td>
</tr>
<tr>
<td>Barium sulfate</td>
<td>10 mg/m³</td>
<td>NE</td>
<td>10 mg/m³</td>
<td>NE</td>
</tr>
<tr>
<td>Inorganic iron oxides</td>
<td>10 mg/m³</td>
<td>NE</td>
<td>10 mg/m³</td>
<td>NE</td>
</tr>
<tr>
<td>Chromium III trivalent chromium</td>
<td>.5 mg/m³</td>
<td>NE</td>
<td>.5 mg/m³</td>
<td>NE</td>
</tr>
</tbody>
</table>

**ENGINEERING CONTROLS** Use local exhaust ventilation to maintain airborne concentrations below exposure limits. Respiratory protection may be required in addition to general room ventilation.

**PERSONAL PROTECTIVE EQUIPMENT** Use a properly fitted, air-purifying or air supplied respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards or the product and the safe working limits of the selected respirator.

**EYE PROTECTION** Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

**SKIN AND BODY PROTECTION** When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene or rubber. Use of barrier cream is recommended. Clean equipment thoroughly after each use. Discard contaminated leather shoes and canvas sneakers.

**OTHER HYGENIC PRACTICES** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

**OTHER WORK PRACTICES** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

**SECTION 9 Physical and Chemical Properties**

| Appearance | Viscous Liquid |
| Form       | varies        |
| Color      | Not available |
| pH         | 40 C / 104 F  |
| Melting/Freezing Temperature | 336 C / 637 F |
| Boiling Point | 485 F               |
| Flash Point | Not available    |
| Ignition Temperature | Not available |
| Autoignition Temperature | Not available |
| Lower explosive limit; na | Upper explosive limit: na |
| Vapor Pressure | Not Available    |
| Vapor Density (air=1) | Not available |
| Specific Gravity (water=1 @39.2F) | 1.55            |
| Evaporation Rate (Bac=1) | None               |
| Odor | mild |
| Odor threshold | Not available |
SECTION 10  Stability and Reactivity

Chemical Stability
Stable under recommended storage conditions

Possibility of Hazardous Reactions
No data available

Conditions to Avoid
Avoid strong acids, bases in bulk and elevated temperatures

Materials to Avoid
Reactive or incompatible with: acids, oxidizers, amines

Hazardous Decomposition Products
Decomposition products formed under fire conditions may include: Carbon oxides, Nitrogen oxides, Aldehydes.

SECTION 11  Toxicological Information

Acute Toxicity
<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>Rat &gt; 4000 mg/kg</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>Rabbit 20,000 mg/kg</td>
</tr>
<tr>
<td>Inhalation LC50</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Carcinogenicity
- IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
- ACGIH: No component of this product presents at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by ACGIH
- NTP: No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

Skin Corrosion/Irritation
Skin Irritant

Serious Eye Damage/Eye Irritation
Eye Irritant
Eyes Rabbit
Severe eye irritation – 24 H

Respiratory or Skin Sensitization
May cause skin or respiratory sensitization

Mutagenicity
Mouse Skin Carcinogenic by RTECS Criteria
Liver, ovarian, thyroid

SECTION 12  Ecological Information

Aquatic Ecotoxicity
No data available

Biodegradability
Persistent Not readily biodegradable

Mobility in soil
No data available

SECTION 13  Disposal Considerations

Waste Disposal
The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residuals. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
SECTION 14 Transport Information

DOT (US)
- Not Regulated

IMDG
- Not Regulated

TDG
- Not Regulated

SECTION 15 Regulatory Information

TSCA INVENTORY STATUS
- All components are listed or exempt

OSHA HAZARDS
- Skin Sensitizer
- Irritant
- Corrosive Material

HMIS Classification
- Health Hazard: 1
- Flammability: 1
- Physical Hazards: 0

NFPA Rating
- 2
- 0
- 0

SARA TITLE III: Section 311/312 Hazard Class
- Acute Health Hazard, Chronic Health Hazard

SARA TITLE III: Section 313 (40CFR370)
- Barium Sulfate is listed in part 372, section 313
- Chromium III oxide contains only 1-3 ppm (0.00001% - 0.00003%) leachable hexavalent chromium. Trivalent Chromium is not listed specifically as a possible carcinogen

CERCLA Information (40CFR302.4)
- This material contains no hazardous or extremely hazardous substances at or above the de minimus concentrations as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:
- This product contains, no listed substances known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16 Other Information

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable. This MSDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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