SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY INFORMATION

Global Coatings Division
H.B. Fuller Company
2900 Granada Lane
Oakdale, MN 55128
Phone: 651-236-3700

Medical Emergency Phone Numbers (24 Hours): 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Unlisted ingredients are not ‘hazardous’ per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for any additional exposure limit guidelines.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>PERCENT</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin</td>
<td>25036-25-3</td>
<td>50 - 70</td>
<td>Not established</td>
</tr>
<tr>
<td>Calcium carbonate</td>
<td>1317-65-3</td>
<td>10 - 30</td>
<td>TWA (Total dust) 15 MG/M3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TWA (Respirable dusty) 5 MG/M3</td>
</tr>
<tr>
<td>Epoxy resin</td>
<td>28064-14-4</td>
<td>10 - 30</td>
<td>Not established</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>80-05-7</td>
<td>1-5</td>
<td>No established</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1332-37-2</td>
<td>1-5</td>
<td>TWA (as Fe) Fume 10 MG/M3</td>
</tr>
<tr>
<td>Aromatic amine</td>
<td>693-98-1</td>
<td>0.1-1</td>
<td>Not established</td>
</tr>
<tr>
<td>Crystalline silica</td>
<td>14808-60-7</td>
<td>0.1-1</td>
<td>TWA (Respirable dust) 0.1 MG/M3</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Dust clouds in air can be ignited by electric sparks, hot surfaces and open flame.
Can cause skin irritation. May cause allergic skin reaction.
May cause an allergic respiratory reaction.
Harmful if swallowed.
Cancer hazard.

HMIS RATING: HEALTH -- 1 FLAMMABILITY -- 1 REACTIVITY -- 0
See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

POTENTIAL HEALTH EFFECTS BY ROUTE OF ENTRY
EYE: Can cause minor irritation, tearing and reddening. Can cause mechanical irritation if dusts are generated.
SKIN: Continued or prolonged contact may irritate the skin and cause a skin rash (dermatitis). May cause sensitization.
Can cause light sensitivity that results in a skin rash when exposed to sunlight or ultraviolet light sources.

INHALATION: Can cause minor respiratory irritation Dust may be slightly irritating to the respiratory tract. Inhalation of dusts produced during cufing, grinding or sanding of this product may cause irritation of the respiratory tract
May cause allergic respiratory reaction.
Overexposure to iron oxide dust/fume may cause siderosis. Overexposure to crystalline silica may cause silicosis.

INGESTION: Ingestion is not an anticipated route of exposure. Harmful if swallowed.

LONG-TERM (CHRONIC) HEALTH EFFECTS
TARGET ORGAN(S): Skin, Lungs

REGULATED CARCINOGEN STATUS:
Unless noted below, this product does not contain regulated levels of NTP, IARC, ACGIH, or OSHA listed carcinogens.

Crystalline silica

EXISTING HEALTH CONDITIONS AFFECTED BY EXPOSURE: Skin disease including eczema and sensitization; Lung disease

SECTION 4: FIRST AID MEASURES
IF IN EYES: Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician Flush eye with water for 20 minutes. Get medical attention.
IF ON SKIN: Wash with soap and water. Remove contaminated clothing, launder immediately, and discard contaminated leather goods. Get medical attention immediately.
If VAPORS INHALED: Remove to fresh air. Call a physician if symptoms persist.
IF SWALLOWED: No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS.

SECTION 5: FIRE FIGHTING MEASURES
FLASH POINT: Not applicable
AUTOIGNITION TEMPERATURE: Not established
LOWER EXPLOSIVE LIMIT (% in air): Not established
UPPER EXPLOSIVE LIMIT (% in air): Not established
EXTINGUISHING MEDIA: Use water spray, foam, dry chemical or carbon dioxide.
MATERIAL SAFETY DATA SHEET

UNUSUAL FIRE AND EXPLOSION HAZARDS: Material will burn in a fire. Normal LEL for powder coatings 0.04 to 0.07 ounces/cubic foot. Strong explosions are not expected below 0.4 to 0.7.

SPECIAL FIRE FIGHTING INSTRUCTIONS: Persons exposed to products of combustion should wear self contained breathing apparatus and full protective equipment.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, Carbon monoxide

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: No health effects expected from the cleanup of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this MSDS.

CLEAN-UP: Avoid creating dusts. Eliminate ignition sources. If a vacuum is used, ensure that the material is wetted or otherwise treated so an explosive dust atmosphere is not created within the vacuum.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: Mildly irritating material. Avoid unnecessary exposure. Avoid creating dusts as an explosive dust air mixture can be created at high concentrations. If dusts are created, ensure no sources of ignition are present. Take precautionary measures to prevent electrostatic discharges.

Storage: Store in a cool, dry place.

Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.

SKIN PROTECTION: Prevent contact with this product. Wear chemically resistant gloves, long sleeved shirt, an apron, and other protective equipment depending on conditions of use.

GLOVES: Nitrite

RESPIRATORY PROTECTION: Respiratory protection may be required to avoid overexposure when handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air ~ Expiator with dust/mist filter. Respirators should be selected by and used following requirements found in OSHA’s respirator standard (29 CFR 1910.134).

VENTILATION:

EXPOSURE LIMITS:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH EXPOSURE LIMITS</th>
<th>AIHA WEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Calcium carbonate</td>
<td>TWA (Total dust) 10 MG/M3</td>
<td>Not established</td>
</tr>
</tbody>
</table>
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PHYSICAL STATE:</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLOR:</td>
<td>Red</td>
</tr>
<tr>
<td>ODOR:</td>
<td>Neutral</td>
</tr>
<tr>
<td>ODOR THRESHOLD:</td>
<td>Not established</td>
</tr>
<tr>
<td>WEIGHT PER GALLON (lbs.):</td>
<td>11.58</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY:</td>
<td>1.39</td>
</tr>
<tr>
<td>SOLIDS (% by weight):</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

pH: Not established
BOILING POINT (deg. C): Not established
FREEZING/MELTING POINT (deg C): Not established
VAPOR PRESSURE (mm Hg): Not established
VAPOR DENSITY: Not established
EVAPORATION RATE: Not established
OCTANOL/WATER COEFFICIENT: Not established

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.
CHEMICAL INCOMPATIBILITY: Not established
HAZARDOUS POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin</td>
<td>Oral LD50 Rat &gt; 30 g/kg</td>
</tr>
<tr>
<td></td>
<td>Inhalation LC50 Rat &gt; 800 mg/cu m/4H</td>
</tr>
<tr>
<td></td>
<td>Dermal LD50 Rabbit &gt; 3 g/kg</td>
</tr>
<tr>
<td>Calcium carbonate</td>
<td>Not established</td>
</tr>
</tbody>
</table>

Calcium carbonate Not established
Epoxy resin | Not established
---|---
Bisphenol A | Oral LD50 Ret = 3250 mg/kg
| Dermal LD50 Rabbit = 3 ml/kg
Iron oxide | Not established
Aromatic amine | Not established
Crystalline silica | Not established

TOXICOLOGY SUMMARY: No additional health information available.

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW: No ecological information available

No levels of volatile organic compound emissions are expected at ambient temperatures and pressure. Depending on powder chemistry, however, higher levels of VOC and low molecular weight hydrocarbons may be emitted at cure temperatures. Emissions data are best developed by monitoring actual plant conditions.

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Disposal via incineration at an approved facility is recommended. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14: TRANSPORTATION INFORMATION

Consult Bill of Lading for transportation information.

SECTION 15: REGULATORY INFORMATION

INVENTORY STATUS

U. S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act’s Inventory requirements.

CANADIAN CEPA DSL: This product is in compliance with the Canadian Domestic Substance List requirements.

If you need more information about the inventory status of this product call 651-236-5858.

TSCA Section 12(b) - Export Notice Requirements
This product contains a chemical substance that is currently on the EPA’s Section 12(b) Export List. Contact the company Global Regulatory Group at 651/236-5858 for the identity of the Section 12(b) chemical(s).

FEDERAL REPORTING
EPA SARA Title III Section 313
Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 72. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4’-Isopropylidenediphenol</td>
<td>80-05-7</td>
<td>1- 5</td>
</tr>
</tbody>
</table>
WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Formation System.

D2B D2A

STATE REPORTING
This MSDS is not prepared for distribution in California.

SECTION 16: ADDITIONAL INFORMATION

This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

Prepared by: The Global Regulatory Department
Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to the H.B. Fuller Company from its suppliers, and because the H.B. Fuller Company has no control over the conditions of handling and use, the H.B. Fuller Company makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and the H.B. Fuller Company assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Company products to comply with all applicable federal, state and local laws and regulations.