Thank you for requesting an MSDS for this product.

We have reviewed our products, conducted a hazard determination, and prepared MSDSs in compliance with the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS). Our MSDSs also provide information on any toxic chemical subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

If this product, or any component of it, is considered to be hazardous or carcinogenic under the OSHA Hazard Communication Standard or the WHMIS regulations, information is provided in Section 2: COMPOSITION/INFORMATION ON INGREDIENTS or in Section 3: HAZARDS IDENTIFICATION.
SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY INFORMATION
H.B. Fuller Powder Coatings
H.B. Fuller Company
2900 Granada Lane
Oakdale, MN 55128
Phone: 651-236-3700

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

PRODUCT INFORMATION
PRODUCT IDENTIFIER: 811561PM
PRODUCT NUMBER: IF56022
PRODUCT DESCRIPTION: Powder coating

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>Barium sulfate</td>
<td>7727-43-7</td>
<td>10-30</td>
<td>TWA (Respirable dust) 5 MG/M3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TWA (Total dust) 10 MG/M3</td>
</tr>
<tr>
<td>Triglycidyl isocyanurate, 1,3,5</td>
<td>2451-62-9</td>
<td>1-5</td>
<td>Not established</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.

May cause allergic skin reaction.

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: Can cause minor skin irritation, defatting, and dermatitis. May cause sensitization.

INHALATION: Can cause minor respiratory irritation. Dust may be slightly irritating to the respiratory tract.
Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract. Overexposure to barium dust/fume may cause baritosis. INGESTION: Ingestion is not an anticipated route of exposure. No hazard in normal industrial use.

LONG-TERM (CHRONIC) HEALTH EFFECTS
REPRODUCTIVE: Contains a substance that is a possible reproductive hazard based on animal studies at doses that could be encountered in the workplace.
TARGET ORGAN(S): Lungs Skin

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

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

SECTION 4: FIRST AID MEASURES
IF IN EYES: Flush eye with water for 20 minutes. Get medical attention.
IF ON SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.
IF VAPORS INHALED: Remove to fresh air. Call a physician if symptoms persist.
IF SWALLOWED: 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.
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 Nitrogen containing gases

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 when handling this product.

SKIN PROTECTION: Avoid skin contact by wearing chemically resistant gloves.

GLOVES: Nitrile

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 purifying respirator with dust/mist filter. Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

VENTILATION: Use local exhaust ventilation or other engineering controls to minimize exposures.

EXPOSURE LIMITS:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH EXPOSURE LIMITS</th>
<th>AIHA WEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium sulfate</td>
<td>TWA (Total dust) 10 MG/M3</td>
<td>Not established</td>
</tr>
<tr>
<td>Triglycidyl isocyanurate, 1,3,5</td>
<td>TWA 0.05 MG/M3</td>
<td>Not established</td>
</tr>
</tbody>
</table>

Based on the most recent animal studies, our TGIC supplier has recommended an exposure limit of 3 mg/M3 TWA for powder coatings containing 1 to 10% TGIC. Section 11: Toxicological Information for more information about TGIC.

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>12.16</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY:</td>
<td>1.46</td>
</tr>
<tr>
<td>SOLIDS (% by weight):</td>
<td>100.0</td>
</tr>
<tr>
<td>pH:</td>
<td>Not established</td>
</tr>
<tr>
<td>BOILING POINT (deg. C):</td>
<td>Not established</td>
</tr>
<tr>
<td>FREEZING/MELTING POINT (deg. C):</td>
<td>Not established</td>
</tr>
<tr>
<td>VAPOR PRESSURE (mm Hg):</td>
<td>Not established</td>
</tr>
<tr>
<td>VAPOR DENSITY:</td>
<td>Not established</td>
</tr>
<tr>
<td>EVAPORATION RATE:</td>
<td>Not established</td>
</tr>
<tr>
<td>OCTANOL/WATER COEFFICIENT:</td>
<td>Not established</td>
</tr>
</tbody>
</table>
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, nitrogen containing gases

SECTION 11: TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium sulfate</td>
<td>Not established</td>
</tr>
<tr>
<td>Triglycidyl isocyanurate, 1,3,5</td>
<td>Oral LD50 Rat = 188 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Dermal LD50 Rat &gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

TOXICOLOGY SUMMARY: Testing on generic powder coatings containing 10% TGIC yielded a single exposure inhalation LC50 of greater than 11,600 mg/M3. The LC50 for a 5 day, 6 hour/day repeated exposure was greater than 1700 mg/M3. Mutagenicity screening using a 9% TGIC coating in a mouse spermatogonial cell study showed an increased rate of chromosomal changes (damage) at an oral dose of 800 mg/M3. Lower dose levels did not demonstrate a statistically significant response. This study also demonstrated a statistically significant dose-response trend. The No-Effect Level (NOEL - no damage to animals or chromosomes at this exposure level) for the study was 100 mg/M3.

Since the previously published studies on powder coatings containing TGIC were designed as worst-case scenarios, a more realistic study was conducted using a pigmented powder coating containing 4.6% TGIC, for nose-only inhalation, at a particle size greater than 10 micrometers. This study showed a NOEL of 1000 mg/M3.

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. Dispose of in an approved landfill. Consult your state, local or provincial authorities and your local waste vendor for more restrictive requirements.

SECTION 14: TRANSPORTATION INFORMATION

Consult Bill of Lading for transportation information.
DOT: NOT REGULATED
IATA: NOT REGULATED
SECTION 15: REGULATORY INFORMATION

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

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

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at 651-236-5858 (USA) or 450-655-1306 x227 (Canada) to request an export review.

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>
</table>

WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Information System.

D1B 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.