Material Safety Data Sheet

Prolite FG Series

Date of Preparation: 10/24/08
Revision: 12/20/10

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Prolite 50FG
Synonyms: Light weight filler
General Use: Engineered filler for use with thermoplastics and thermosets.
Manufacturer: The R. J. Marshall Company
26776 W. 12 Mile Road
Southfield, MI 48034-7807
Phone: (248) 353-4100, Fax: (248) 948-6460

Emergency Phone: (800) 424-9300
Date Revised: 12/20/10
Preparer: Stephanie Nichols

Section 2 - Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Linked Polymer</td>
<td>--------------</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>Glass Fibers</td>
<td>--------------</td>
</tr>
<tr>
<td>Inorganic Filler</td>
<td>--------------</td>
</tr>
</tbody>
</table>

*Calcium Carbonate products may contain crystalline silica up to 0.75% max and varies naturally.

Note: Calcium carbonate products may contain trace amounts of naturally occurring elements that are regulated in some states. These materials and their typical levels are as follows: Lead at less than 1ppm, Arsenic at less than 1 ppm.

Trace Impurities:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Linked Polymer</td>
<td>none estab.</td>
<td>none estab.</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>10 mg/m³</td>
<td>0.025 mg/m³ respirable dust</td>
</tr>
<tr>
<td>Glass Fibers</td>
<td>none estab.</td>
<td>none estab.</td>
</tr>
<tr>
<td>Nuisance dust (Inorganic Filler)</td>
<td>15 mg/m³ total dust</td>
<td>none estab.</td>
</tr>
<tr>
<td></td>
<td>5 mg/m³ respirable dust</td>
<td>none estab.</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

★★★★☆ Emergency Overview ★★★★★

Potential Health Effects

Primary Entry Routes: Inhalation, Eye, and Ingestion.

Acute Effects

Inhalation: Inhalation of high concentrations of this inert nuisance particulate can result in mild irritation of the respiratory tract.

Eye: May cause irritation through mechanical abrasion.

Skin: May cause irritation through mechanical abrasion.

Ingestion: Unlikely.

Carcinogenicity: IARC has listed crystalline silica as a human carcinogen.

Chronic Effects: This product contains crystalline silica as an impurity. Prolonged exposure to respirable crystalline silica dust concentrations exceeding occupational exposure limits without the use of the proper respirator may increase the risk of developing a disabling lung disease called silicosis. This product is not listed as a carcinogen by OSHA, NTP, or IARC.

Section 4 - First Aid Measures

Inhalation: If overcome by high dust concentrations, remove to a ventilated area.

Eye Contact: Flush eyes thoroughly for 15 minutes taking care to rinse under eyelids. Do not scrub. Abrasion may cause irritation. If discomfort continues, continue to wash with water. If irritation persists, consult a physician.

Skin Contact: Wash skin thoroughly with soap and water for at least 15 minutes. Consult a physician if irritation persists.

Ingestion: Ingestion of very large quantities may result in intestinal obstruction and/or constipation. Considered to be of very low toxicity.

After first aid, get appropriate in-plant, paramedic, or community medical support.
**Section 5 - Fire-Fighting Measures**

Flash Point: None known.
Flash Point Method: n/a
Burning Rate: Not determined.
Auto-ignition Temperature: Not determined.
Flammability Classification: Non-flammable.
Extinguishing Media: Water spray, carbon dioxide, or other dry chemical.
Unusual Fire or Explosion Hazards: None known.
Hazardous Combustion Products: None.
Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure-demand or positive-pressure mode.

**Section 6 - Accidental Release Measures**

Spill/Leak Procedures: Collect solids. Recycle if possible.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

**Section 7 - Handling and Storage**

Handling Precautions: Avoid generating dust during handling.
Storage Requirements: Keep material dry.

**Section 8 - Exposure Controls / Personal Protection**

Engineering Controls:
Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.
Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA.
Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.
Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.
Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.
Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**Section 9 - Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>white powder</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>white odorless powder</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>n/e</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>n/e</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>n/a</td>
</tr>
<tr>
<td>Formula Weight</td>
<td>n/a</td>
</tr>
<tr>
<td>Density</td>
<td>n/e</td>
</tr>
<tr>
<td>Specific Gravity (H2O=1, at 4 °C)</td>
<td>Varies according to grade</td>
</tr>
<tr>
<td>pH</td>
<td>n/e</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Slight</td>
</tr>
<tr>
<td>Other Solubilities</td>
<td>n/a</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>n/a</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>n/a</td>
</tr>
<tr>
<td>Viscosity</td>
<td>n/a</td>
</tr>
<tr>
<td>Refractive Index</td>
<td>n/a</td>
</tr>
<tr>
<td>Surface Tension</td>
<td>n/a</td>
</tr>
<tr>
<td>% Volatile</td>
<td>n/a</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>n/a</td>
</tr>
</tbody>
</table>
### Section 10 - Stability and Reactivity

**Stability:** This product is stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization cannot occur.

**Chemical Incompatibilities:** Calcium Carbonate will react with strong acids to form carbon dioxide.

**Conditions to Avoid:** None Known.

**Hazardous Decomposition Products:** n/a

### Section 11 - Toxicological Information

#### Toxicity Data:

**Eye Effects:** Nuisance dust. May cause irritation through mechanical abrasion. Flush with water for at least 15 minutes. Consult physician if irritation is persistent.

**Acute Inhalation Effects:** Nuisance dust. Overexposure to dust may cause irritation to the respiratory tract. Should this occur, remove affected individual to fresh air. If symptoms persist, consult a physician.

**Skin Effects:** Nuisance dust. May cause irritation through mechanical abrasion. Wash skin thoroughly with soap and water.

**Acute Oral Effects:** None known.

**Chronic Effects:** None known.

**Carcinogenicity:** Crystalline silica is listed as a human carcinogen.

### Section 12 - Ecological Information

No information available.

### Section 13 - Disposal Considerations

**Disposal:** Recycle or landfill if possible. This substance is inert and does not require special disposal methods. Follow applicable Federal, state, and local regulations.

### Section 14 - Transport Information

**DOT Transportation Data (49 CFR 172.101):** This product is not classified as dangerous under the transport regulations for road, rail, sea, or air transport.

### Section 15 - Regulatory Information

**EPA Regulations:**
- RCRA Hazardous Waste Number (40 CFR 261.33): Not listed
- RCRA Hazardous Waste Classification: Not classified
- CERCLA Hazardous Substance (40 CFR 302.4) Not listed
- SARA Toxic Chemical (40 CFR 372.65): Not listed
- SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed
- Crystalline Silica is subject to the reporting requirements of California’s Safe Drinking Water and Toxic Enforcement Act of 1986 (“Proposition 65”)

**OSHA Regulations:**
- Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

**TSCA**
- This substance or all of its components are on the Chemical Substances Inventory of the Toxic Substance Control Act (TSCA Inventory [USA]). Please note that this product is not subject to any legal reporting requirements under these acts.

**INTERNATIONAL REGULATIONS**
- Canadian Domestic Substances List: Components of this product are listed on the Canadian DSL.
- European Community: Components of this product are listed on ECOIN, the European Core Inventory (EC) market
Section 16 - Other Information

Prepared By: Stephanie Nichols
Revision Notes: Updated section 2

Product Grades Available from the R. J. Marshall Company (this list may be incomplete):

| Prolite 50FG | Prolite FR50FG |

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