# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Common Name/Trade Name</th>
<th>Fuller’s Earth</th>
<th>Catalog Number(s)</th>
<th>F1093</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Name(s)</td>
<td>Clays, Fuller’s Earth; Florida earth; Floridin; Florigel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synonym</td>
<td>The chief ingredient of Fuller’s Earth is Hydrated Aluminum-magnesium Silicate which is also known as Attapulgite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Hydrated Aluminum-Magnesium Silicate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Family</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Formula</td>
<td>Not applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier</td>
<td>SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Hydrated aluminum-magnesium silicate (Attapulgite)</td>
<td>12174-11-7</td>
<td></td>
<td></td>
<td></td>
<td>90-99</td>
</tr>
<tr>
<td>2) Quartz (Silica, crystalline)</td>
<td>14808-60-7</td>
<td>0.3</td>
<td></td>
<td></td>
<td>1-10</td>
</tr>
</tbody>
</table>

### Toxicological Data on Ingredients

- **Quartz**
  - LD50: Not available.
  - LC50: Not available.

- **Hydrated aluminum-magnesium silicate (chief ingredient of Fuller’s Earth)**
  - LD50: Not available.
  - LC50: Not available.
**Section 3. Hazards Identification**

**Potential Acute Health Effects**
Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects**
Hazardous in case of inhalation.

**CARCINOGENIC EFFECTS**
Classified 2B (Possible for human.) by IARC [Palygorskite (attipulgite) (long fibers, >5 micrometers)]
Classified 3 (Not classifiable as to carcinogenicity to human) by IARC [Palygorskite (attipulgite) (short fibers, <5 micrometers)]
Classified 1 (Proven for human.) by IARC, 1 (Clear evidence.) by NTP, + (Proven.) by NIOSH, Classified A2 (Suspected for human.) by ACGIH. [Quartz (Silica, crystalline)]

**MUTAGENIC EFFECTS**: Not available.

**TERATOGENIC EFFECTS**: Not available.

**DEVELOPMENTAL TOXICITY**: Not available.

The substance may be toxic to lungs, upper respiratory tract. Repeated or prolonged exposure to the substance can produce target organs damage.

**Section 4. First Aid Measures**

**Eye Contact**
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

**Skin Contact**
Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

**Serious Skin Contact**
Not available.

**Inhalation**
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation**
Not available.

**Ingestion**
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or wristband.

**Serious Ingestion**
Not available.

**Section 5. Fire and Explosion Data**

**Flammability of the Product**
May be combustible at high temperature.

**Auto-Ignition Temperature**
Not available.

**Flash Points**
Not available.

**Flammable Limits**
Not available.

**Products of Combustion**
Not available.

**Fire Hazards in Presence of Various Substances**
Slightly flammable to flammable in presence of heat.
Non-flammable in presence of open flames and sparks, of shocks, of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis, of moisture.

**Fire Fighting Media and Instructions**
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Explosion Hazards in Presence of Various Substances**
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

**Special Remarks on Fire Hazards**
Powerful oxidizers may cause fire. (Quartz)

**Special Remarks on Explosion Hazards**
Powerful oxidizers may cause explosions. (Quartz)
**Section 6. Accidental Release Measures**

**Small Spill**
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill**
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

**Section 7. Handling and Storage**

**Precautions**
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible.

**Storage**
Keep container tightly closed. Keep container in a cool, well-ventilated area.

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

**Engineering Controls**
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection**
Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill**
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits**

**Quartz**
TWA: 0.05 (mg/m³) from ACGIH (TLV) [United States] [1999] Inhalation Respirable.
TWA: 0.1 (mg/m³) from OSHA (PEL) [United States] Inhalation Respirable.
TWA: 0.2 (mg/m³) [United Kingdom (UK)] Inhalation Respirable.
TWA: 0.2 (mg/m³) [Australia] Inhalation.
TWA: 0.1 (mg/m³) [Canada] Inhalation Respirable.
Hydrated Magnesium Aluminum Silicate
TWA: 15 mg/m³ (Inhalation, total dust); 5 mg/m³ (Inhalation, respirable fraction) from OSHA [United States]
TWA: 10 mg/m³ (Inhalation, total dust); 3 mg/m³ (Inhalation, respirable fraction) from ACGIH [United States]

Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical state and appearance</th>
<th>Solid. (Powdered solid.)</th>
<th>Odor</th>
<th>Odorless.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>Not applicable.</td>
<td>Taste</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH (1% soln/water)</td>
<td>Not applicable.</td>
<td>Color</td>
<td>Tan. Grey to Yellow.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting Point</td>
<td>1710°C (3110°F) based on data for: Quartz.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Temperature</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>The only known value is 2.65 (Water = 1) (Quartz).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatility</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water/Oil Dist. Coeff.</td>
<td>The product is insoluble in water and oil.</td>
<td></td>
<td></td>
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</tbody>
</table>

*Continued on Next Page*
### Fuller’s Earth

**Ionicity (in Water)**
Not available.

**Dispersion Properties**
Is not dispersed in cold water, hot water.

**Solubility**
Insoluble in cold water, hot water, organic solvents

### Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instability Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions of Instability</td>
<td>Excess heat, incompatible materials, dust generation</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Slightly reactive to reactive with oxidizing agents.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Special Remarks on Reactivity**
Incompatibility with powerful oxidizers: fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, hydrogen peroxide, etc.; Incompatible with acetylene and ammonia. This chemical is attacked by Hydrogen Fluoride. Silica will dissolve in Hydrofluoric Acid and produce the corrosive gas Silicon Tetrafluoride (SiF4). May be attacked by strong alkalis, especially with hot. (Quartz)

**Special Remarks on Corrosivity**
Not available.

**Polymerization**
Will not occur.

### Section 11. Toxicological Information

**Routes of Entry**
Inhalation. Ingestion.

**Toxicity to Animals**
LD50: Not available. LC50: Not available.

**Chronic Effects on Humans**
CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC [Palygorskite (attipulgite) (long fibers, >5 micrometers)]; Classified 3 (Not classifiable as to carcinogenicity to human) by IARC [Palygorskite (attipulgite) (short fibers, <5 micrometers)]; Classified 1 (Proven for human.) by IARC, 1 (Clear evidence.) by NTP, + (Proven.) by NIOSH, Classified A2 (Suspected for human.) by ACGIH, [Quartz (Silica, crystalline)]

May cause damage to the following organs: lungs, upper respiratory tract.

**Other Toxic Effects on Humans**
Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals**
Not available.

**Special Remarks on Chronic Effects on Humans**
May cause cancer.

**Special Remarks on other Toxic Effects on Humans**
Acute Potential Health Effects:
Skin: May cause mechanical irritation of the skin.
Eyes: May cause mechanical irritation of the eyes.
Inhalation: Can cause irritation to the respiratory tract. This product contains Quartz (crystalline silica). Acute pneumoconiosis or silicosis from overwhelming exposure to crystalline silica dust has occurred. Coughing and irritation of the throat are early symptoms. May also cause difficulty breathing or shortness of breath.
Ingestion: It may cause gastrointestinal tract irritation with nausea, diarrhea. It is not absorbed from the gastrointestinal tract.
Chronic Potential Health Effects:
Inhalation: May cause lung damage if exposure is repeated or prolonged. Prolonged or repeated inhalation may cause cancer. Risk of cancer depends upon duration and level of exposure. It can also cause silicosis or pneumoconiosis, a form of lung scarring that can cause shortness of breath, reduced lung function. May also affect blood (changes in white blood cell count)
Aggravation of Pre-existing Conditions: Inhalation may increase the progression of tuberculosis; susceptibility is apparently not increased. Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury.
### Section 12. Ecological Information

**Ecotoxicity**  
Not available.

**BOD5 and COD**  
Not available.

**Products of Biodegradation**  
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation**  
Not available.

**Special Remarks on the Products of Biodegradation**  
Not available.

### Section 13. Disposal Considerations

**Waste Disposal**  
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14. Transport Information

**DOT Classification**  
Not a DOT controlled material (United States).

**Identification**  
Not applicable.

**Special Provisions for Transport**  
Not applicable.

**DOT (Pictograms)**

![No DOT Pictogram]

### Section 15. Other Regulatory Information and Pictograms

**Federal and State Regulations**

| California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Attapulgite, Activated, Colloidal (listed as Palygorskite fibers (>5 micrometers in length); Quartz (listed as Silica, crystalline) |
| California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Attapulgite, Activated, Colloidal (listed as Palygorskite fibers (>5 micrometers in length); Quartz (listed as Silica, crystalline) |
| Illinois toxic substances disclosure to employee act: Quartz |
| Pennsylvania RTK: Quartz |
| Minnesota: Quartz |
| Massachusetts RTK: Quartz |
| New Jersey: Quartz |
| California Directors's List of Hazardous Substances: Attapulgite, Activated, Colloidal (listed as Attapulgite) |
| TSCA 8(b) inventory: Quartz |

**California Proposition 65 Warnings**

| California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Attapulgite, Activated, Colloidal (listed as Palygorskite fibers (>5 micrometers in length); Quartz (listed as Silica, crystalline) |
| California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found. |

**Other Regulations**


**Other Classifications**

| WHMIS (Canada)  
Not available. However, it might be classified as WHMIS Class D-2A: Material causing other toxic effects (VERY TOXIC). |
| DSCL (EEC) |

*Continued on Next Page*
R37- Irritating to respiratory system.  
R45- May cause cancer.  
S36- Wear suitable protective clothing.  

<table>
<thead>
<tr>
<th>HMIS (U.S.A.)</th>
<th>National Fire Protection Association (U.S.A.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>E</td>
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</table>

<table>
<thead>
<tr>
<th>WHMIS (Canada) (Pictograms)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>DSCL (Europe) (Pictograms)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TDG (Canada) (Pictograms)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ADR (Europe) (Pictograms)</th>
</tr>
</thead>
</table>

Protective Equipment

<table>
<thead>
<tr>
<th>Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloves.</td>
</tr>
<tr>
<td>Lab coat.</td>
</tr>
<tr>
<td>Dust respirator. Be sure to use an approved/certified respirator or equivalent.</td>
</tr>
<tr>
<td>Safety glasses.</td>
</tr>
</tbody>
</table>
### Section 16. Other Information

<table>
<thead>
<tr>
<th>MSDS Code</th>
<th>F3420</th>
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<tbody>
<tr>
<td>References</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Special Considerations</td>
<td>Major Uses: Industrial filler, extender; decolorizing of oils and other liquids; in oil-well drilling muds, insecticide carrier; in floor sweeping compounds; rubber filler; carrier for catalysts; filtering medium</td>
</tr>
</tbody>
</table>

Validated by Sonia Owen on 10/5/2007.  
Verified by Sonia Owen.  
Printed 1/16/2008.

### Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.