## Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Common Name/Trade Name</th>
<th>Catalog Number(s)</th>
<th>CAS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colloidal Silicon Dioxide</td>
<td>S1510</td>
<td>7631-86-9</td>
</tr>
</tbody>
</table>

**Manufacturer**

SPECTRUM LABORATORY PRODUCTS INC.  
14422 S. SAN PEDRO STREET  
GARDENA, CA 90248

**Commercial Name(s)**

Not available.

**Synonym**

Aerosil 200; Amorphous Fumed Silica; Silica, colloidal anhydrous

**Chemical Name**

Silicon Dioxide

**Chemical Family**

Not available.

**Chemical Formula**

SIO2

**Supplier**

SPECTRUM LABORATORY PRODUCTS INC.  
14422 S. SAN PEDRO STREET  
GARDENA, CA 90248

**IN CASE OF EMERGENCY**

CHEMTREC (24hr) 800-424-9300

**CALL (310) 516-8000**

## Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Exposure Limits</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAS #</strong></td>
<td><strong>TWA (mg/m³)</strong></td>
</tr>
<tr>
<td>7631-86-9</td>
<td>6</td>
</tr>
</tbody>
</table>

### Toxicological Data on Ingredients

Colloidal Silicon Dioxide:

**ORAL (LD50):** Acute: 3160 mg/kg [Rat], >5000 mg/kg [Rat].

**DERMAL (LD50):** Acute: >2000 mg/kg [Rabbit].

## Section 3. Hazards Identification

### Potential Acute Health Effects

Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Severe over-exposure can result in death.

### Potential Chronic Health Effects

**CARCINOGENIC EFFECTS:** 3 (Not classifiable for human.) by IARC.

**MUTAGENIC EFFECTS:** Not available.

**TERATOGENIC EFFECTS:** Not available.

**DEVELOPMENTAL TOXICITY:** Not available.

Repeated or prolonged exposure is not known to aggravate medical condition.

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Continued on Next Page
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 immediately. |
| 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. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear. |
| Serious Ingestion | Not available. |

Section 5. Fire and Explosion Data

| Flammability of the Product | Non-flammable. |
| Auto-Ignition Temperature | Not applicable. |
| Flash Points | Not applicable. |
| Flammable Limits | Not applicable. |
| Products of Combustion | Not available. |
| Fire Hazards in Presence of Various Substances | Not applicable. |
| Fire Fighting Media and Instructions | Not applicable. |
| Special Remarks on Fire Hazards | Not available. |
| Special Remarks on Explosion Hazards | Heating a mixture of powdered magnesium and silica (later found not to be absolutely dry) cause a violent explosion rather than the vigorous reaction anticipated. |

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 | Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. 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. |

Continued on Next Page
Section 7. Handling and Storage

Precautions
Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label.

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

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
TWA: 6 STEL: 18 (mg/m³) [United Kingdom (UK)] Inhalation Total.
TWA: 2.4 STEL: 7.2 (mg/m³) [United Kingdom (UK)] Inhalation Respirable.
TWA: 6 (mg/m³) from NIOSH [United States] Inhalation Total.
TWA: 2 (mg/m³) [Australia] Inhalation Respirable.
TWA: 2 (mg/m³) [Canada] Inhalation Total.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance
Solid. (Powdered solid.)

Molecular Weight
Not available.

pH (1% soln/water)
Not available.

Boiling Point
2230°C (4046°F)

Critical Temperature
Not available.

Specific Gravity
2 - 2.2 (Water = 1)

Section 10. Stability and Reactivity Data

Stability
The product is stable.

Instability Temperature
Not available.

Conditions of Instability
Incompatible materials

Incompatibility with various substances
Not available.

Corrosivity
Not considered to be corrosive for metals and glass.

Continued on Next Page
### Colloidal Silicon Dioxide

<table>
<thead>
<tr>
<th>Special Remarks on Reactivity</th>
<th>Incompatible with Fluoride, oxygen, difluoride, chlorine trifluoride. Vinyl acetate vapor may react vigorously in contact with silica gel.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Remarks on Corrosivity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Polymerization</td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>

### Section 11. Toxicological Information

#### Routes of Entry
- Inhalation. Ingestion.

#### Toxicity to Animals
- Acute oral toxicity (LD50): 3160 mg/kg [Rat].
- Acute dermal toxicity (LD50): >2000 mg/kg [Rabbit].
- Acute toxicity of the dust (LC50): >2.2 mg/l 1 hours [Rat].

#### Chronic Effects on Humans
- CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC.

#### 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
- Not available.

#### Special Remarks on other Toxic Effects on Humans
- Acute Potential Health Effects:
  - Skin: May cause irritation and drying of the skin.
  - Eye: Dust may cause eye irritation and discomfort.
  - Inhalation: Dust may cause respiratory tract irritation and discomfort.
  - Ingestion: Not expected to be very toxic.
  - Chronic Potential Health Effects: No chronic (long term) effects are known for humans.

### Section 12. Ecological Information

#### Ecotoxicity
- Ecotoxicity in water (LC50): 5000 mg/l 96 hours [Fish (Brachydanio rerio)]. 7600 mg/l 48 hours [Daphnia (Ceriodaphnia dubia)]. 440 mg/l 72 hours [Algae (Pseudokirchneriella subcapitata)].

#### 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
- The product itself and its products of degradation are not toxic.

#### 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).
- Not an IATA controlled material

#### Identification
- Not applicable.

#### Special Provisions for Transport
- Not applicable.

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**Continued on Next Page**
Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations
- Pennsylvania RTK: Colloidal Silicon Dioxide
- Minnesota: Colloidal Silicon Dioxide
- Massachusetts RTK: Colloidal Silicon Dioxide
- New Jersey: Colloidal Silicon Dioxide
- California Director’s List of Hazardous Substances (8 CCR 339): Colloidal Silicon Dioxide
- TSCA 8(b) inventory: Colloidal Silicon Dioxide

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: No products were found.
- 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
- EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 2231-545-4).
- Canada: Listed on Canadian Domestic Substance List (DSL).
- China: Listed on National Inventory.
- Japan: Listed on National Inventory (ENCS).
- Korea: Listed on National Inventory (KECI).
- Philippines: Listed on National Inventory (PICCS).
- Australia: Listed on AICS.

Other Classifications
- WHMIS (Canada): Not controlled under WHMIS (Canada).
- DSCL (EEC): This product is not classified according to the EU regulations.

HMIS (U.S.A.)

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Fire Hazard</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>E</td>
</tr>
</tbody>
</table>

S24/25- Avoid contact with skin and eyes.

National Fire Protection Association (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Specific hazard</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Equipment
- Gloves.

Continued on Next Page
Lab coat.

Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Safety glasses.

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**Section 16. Other Information**

<table>
<thead>
<tr>
<th>MSDS Code</th>
<th>S3319X</th>
</tr>
</thead>
<tbody>
<tr>
<td>References</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Special Considerations</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Validated by Sonia Owen on 6/25/2013.  
Verified by Sonia Owen.  

CALL (310) 516-8000

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**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.