



# Material Safety Data Sheet

<b>NFPA</b>  	<b>HMIS</b>  <table border="1" style="margin: auto;"> <tr><td style="background-color: cyan;">Health Hazard</td><td style="text-align: center; border: 1px solid black;">1</td></tr> <tr><td style="background-color: pink;">Fire Hazard</td><td style="text-align: center; border: 1px solid black;">0</td></tr> <tr><td style="background-color: yellow;">Reactivity</td><td style="text-align: center; border: 1px solid black;">0</td></tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0	<b>Personal Protective Equipment</b>    See Section 15.
Health Hazard	1							
Fire Hazard	0							
Reactivity	0							

<b>Section 1. Chemical Product and Company Identification</b>		<i>Page Number: 1</i>
<b>Common Name/Trade Name</b>	<b>Silica gel, grade 643, 200-425 mesh</b>	<b>Catalog Number(s).</b> SIL66
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>CAS#</b> 7631-86-9 (other related CAS numbers: 63231-67-4 or 112926-00-8)
<b>Commercial Name(s)</b>	Not available.	<b>RTECS</b> VV7565000
<b>Synonym</b>	Amorphous silicon dioxide, chemically prepared; Synthetic amorphous silica Synthetic amorphous silica, not to be confused with crystalline silica such as quartz, cristobalite, or tridymite or with diatomaceous earth or other naturally occurring forms of amorphous silica that frequently contain crystalline forms.	<b>TSCA</b> TSCA 8(b) inventory: Silica gel (Silica)
<b>Chemical Name</b>	Synthetic Amorphous Silica	<b>CI#</b> Not available.
<b>Chemical Family</b>	Not available.	<b><u>IN CASE OF EMERGENCY</u></b> <b><u>CHEMTREC (24hr) 800-424-9300</u></b>  CALL (310) 516-8000
<b>Chemical Formula</b>	SiO <sub>2</sub>	
<b>Supplier</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

<b>Section 2. Composition and Information on Ingredients</b>					
		<i>Exposure Limits</i>			
Name	CAS #	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	% by Weight
1) Silica gel, grade 15, 30-60 mesh	7631-86-9	6			100
<b>Toxicological Data on Ingredients</b> <b>Silica gel, grade 15, 30-60 mesh:</b> ORAL (LD50): Acute: >31600 mg/kg [Rat. This is data from a 48 hr. oral test for DOT hazard classification conducted with finely-ground silica gel.]. >5000 mg/kg [Rat. Date is from LOLI and in ECETOC JACC report]. DERMAL (LD50): Acute: >2000 mg/kg [Rabbit. This is data from a 48 hr. dermal test for DOT hazard classification conducted with finely-ground silica gel. It is also in LOLI.]. >5000 mg/kg [Rabbit. Data is from ECETOC JACC report]. DUST (LC50): Acute: >200000 mg/l 1 hours [Rat]. >140 - >2000 mg/m <sup>3</sup> 4 hours [Rat].					

**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** **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.

**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. 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.

**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.

**Fire Fighting Media and Instructions** Not applicable.

**Special Remarks on Fire Hazards** Not available.

**Special Remarks on Explosion Hazards** Substance can explode when wet and heated with powdered magnesium.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	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.
<b>Large Spill</b>	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**

<b>Precautions</b>	Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic

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

<b>Engineering Controls</b>	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.
<b>Personal Protection</b>	Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	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.
<b>Exposure Limits</b>	<p>TWA: 10 (mg/m<sup>3</sup>) from ACGIH (TLV) [United States] Inhalation Total.  TWA: 20 (mppcf) from OSHA (PEL) [United States] Inhalation Total.  TWA: 6 (mg/m<sup>3</sup>) from NIOSH [United States] Inhalation Total.  TWA: 3 (mg/m<sup>3</sup>) from ACGIH (TLV) [United States] Inhalation Respirable.  TWA: 5 (mg/m<sup>3</sup>) [Canada] Inhalation Total.  TWA: 2 (mg/m<sup>3</sup>) [Canada] Inhalation Respirable.  TWA: 4 (mg/m<sup>3</sup>) [Canada] Inhalation Total.  TWA: 1.5 (mg/m<sup>3</sup>) [Canada] Inhalation Respirable.  TWA: 6 (mg/m<sup>3</sup>) [Canada] Inhalation Total.  TWA: 10 (mg/m<sup>3</sup>) [Canada] Inhalation Total.</p> <p>Consult local authorities for acceptable exposure limits.</p>

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Solid. (Granular solid. Beads solid. Powdered solid.)	<b>Odor</b>	Odorless.
<b>Molecular Weight</b>	60.09 g/mole	<b>Taste</b>	Tasteless.
<b>pH (1% soln/water)</b>	Not applicable.	<b>Color</b>	White.
<b>Boiling Point</b>	Not available.		
<b>Melting Point</b>	Not available.		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	2.1-2.2 (Water = 1)		
<b>Vapor Pressure</b>	Not applicable.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	Not available.		

Continued on Next Page

<b>Solubility</b>	Insoluble in cold water. Soluble in hot KOH and NaOH solutions. Insoluble in ethanol. Insoluble in acids except hydrofluoric acid
-------------------	--

### Section 10. Stability and Reactivity Data

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Incompatible materials, moisture, excess dust generation.
<b>Incompatibility with various substances</b>	Not available.
<b>Corrosivity</b>	Non-corrosive in presence of glass.
<b>Special Remarks on Reactivity</b>	Hygroscopic. Incompatible with hydrogen fluoride, xenon hexafluoride, oxygen difluoride, and chlorine trifluoride.
<b>Special Remarks on Corrosivity</b>	Not available.
<b>Polymerization</b>	Will not occur.

### Section 11. Toxicological Information

<b>Routes of Entry</b>	Inhalation. Ingestion.
<b>Toxicity to Animals</b>	<b>WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.</b> Acute oral toxicity (LD50): >5000 mg/kg [Rat. Data is from LOLI and in ECETOC JACC report]. Acute dermal toxicity (LD50): >2000 mg/kg [Rabbit. This is data from a 48 hr. dermal test for DOT hazard classification conducted with finely-ground silica gel. It is also in LOLI.]. Acute toxicity of the dust (LC50): >140 - >2000 mg/m <sup>3</sup> 4 hours [Rat].
<b>Chronic Effects on Humans</b>	<b>CARCINOGENIC EFFECTS:</b> 3 (Not classifiable for human.) by IARC.
<b>Other Toxic Effects on Humans</b>	Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	Not available.
<b>Special Remarks on other Toxic Effects on Humans</b>	Acute Potential Health Effects: Skin: May cause irritation with dryness of the skin in cases of severe exposure Eyes: No adverse effects expected, but dust may cause mechanical irritation. Inhalation: May cause dryness and irritation to mucous membranes and respiratory tract in case of severe exposure. Ingestion: May be harmful if swallowed in large amounts. However, no adverse effects are expected for normal industrial handling. Chronic Potential Health Effects: Skin: Prolonged or repeated exposure may cause drying or cracking of the skin. Ingestion: Prolonged or repeated ingestion of large amounts may cause hypermolytiy and diarrhea. Inhalation: Prolonged or repeated inhalation of amorphous silica dust or fume may cause pneumoconiosis and a benign type of pulmonary fibrosis. Symptoms may include shortness of breath and labored breathing and discomfort in the chest. Note: Silica gel is a synthetic amorphous silica, not to be confused with crystalline silica such as quartz, cristobalite, or tridymite or with diatomaceous earth or other naturally occurring forms of amorphous silica that frequently contain crystalline forms. Epidemiological studies indicate a low potential for health effects.


**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Ecotoxicity in water (LC50): 440 mg/l 72 hours [Algae (Pseudokirchneriella subcapitata)]. 5000 mg/l 96 hours [Fish (Brachydanio rerio)]. 7600 mg/l 48 hours [Daphnia (Ceriodaphnia dubia)].
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation</b>	The product itself and its products of degradation are not toxic.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

**Section 13. Disposal Considerations**

<b>Waste Disposal</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
-----------------------	--

**Section 14. Transport Information**

<b>DOT Classification</b>	Not a DOT controlled material (United States).
<b>Identification</b>	Not applicable.
<b>Special Provisions for Transport</b>	Not applicable.
<b>DOT (Pictograms)</b>	

**Section 15. Other Regulatory Information and Pictograms**

<b>Federal and State Regulations</b>	Pennsylvania RTK: Silica gel, grade 15, 30-60 mesh Minnesota: Silica gel, grade 15, 30-60 mesh Massachusetts RTK: Silica gel, grade 15, 30-60 mesh New Jersey: Silica gel, grade 15, 30-60 mesh TSCA 8(b) inventory: Silica gel, grade 15, 30-60 mesh	
<b>California Proposition 65 Warnings</b>	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.	
<b>Other Regulations</b>	EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 231-545-4). 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.	
<b>Other Classifications</b>	<b>WHMIS (Canada)</b>	Not controlled under WHMIS (Canada).
	<b>DSCL (EEC)</b>	This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.)

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	E

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

Health



Flammability

Reactivity

Specific hazard

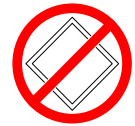
WHMIS (Canada)  
(Pictograms)



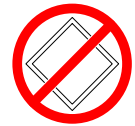
DSCL (Europe)  
(Pictograms)



TDG (Canada)  
(Pictograms)



ADR (Europe)  
(Pictograms)



Protective Equipment



Gloves.



Lab coat.



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



Safety glasses.

Section 16. Other Information

MSDS Code S3309

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 1/23/2012.

Verified by Sonia Owen.

Printed 1/23/2012.

CALL (310) 516-8000

**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.*