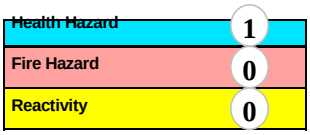
GARDENA, CA
NEW BRUNSWICK, NJ

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
		 See Section 15.

Section 1. Chemical Product and Company Identification

Common Name/ Trade Name	**Silica gel, for Chromatography, 200-500 Micron, (37-75 mesh), 90 angstrom**
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248
Commercial Name(s)	Not available.
Synonym	Amorphous silicon dioxide, chemically prepared. Synthetic amorphous silica, not to be confused with crystalline silica such as quartz, cristobalite, or tridymite or with diatomaceous earth or other naturally occuring forms of amorphous silica that frequently contain crystalline forms.
Chemical Name	Synthetic Amorphous Silica
Chemical Family	Not available.
Chemical Formula	Not available.
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248

Catalog Number(s).	SIL31
CAS#	7631-86-9
RTECS	Not available.
TSCA	TSCA 8(b) inventory: Silica gel (Silica)
CI#	Not available.

IN CASE OF EMERGENCY
CHEMTREC (24hr) 800-424-9300

CALL (310) 516-8000

Section 2.Composition and Information on Ingredients

		Exposure Limits			
Name	**CAS #**	**TWA (mg/m^3)**	**STEL (mg/m^3)**	**CEIL (mg/m^3)**	**% by Weight**
1) Silica gel, for Chromatograhy, 200-500 Micron, (37-75 mesh), 90 angstrom	7631-86-9	6			100

Toxicological Data on Ingredients

Silica gel:
ORAL (LD50): Acute: >15000 mg/kg [Rat (IUCLID Dataset)]. >20000 mg/kg [Rat (IUCLID Dataset)]. >31600 mg/kg [Rat (IUCLID Dataset)].
DERMAL (LD50): Acute: >2000 mg/kg [Rabbit (IUCLID Dataset)].

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.
The substance may be toxic to upper respiratory tract, eyes.
Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

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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.
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

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.

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Section 7. Handling and Storage

Precautions	Keep locked up.. Do not ingest. Do not breathe dust. Wear suitable protective clothing. 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: 5 (mg/m^3) [Canada] Total. TWA: 2 (mg/m^3) [Canada] Respirable. TWA: 6 (mg/m^3) from NIOSH [United States] Total. Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Granular solid. . Powdered solid.)	**Odor**	Odorless.
Molecular Weight	Not available.	**Taste**	Tasteless.
pH (1% soln/water)	Not applicable.	**Color**	White.

Boiling Point	2230℃ (4046℉)
Melting Point	1700℃ (3092℉)
Critical Temperature	Not available.
Specific Gravity	2.1 (Water = 1)
Vapor Pressure	Not applicable.
Vapor Density	Not available.
Volatility	Not available.
Odor Threshold	Not available.
Water/Oil Dist. Coeff.	Not available.
Ionicity (in Water)	Not available.
Dispersion Properties	Not available.
Solubility	Insoluble in cold water. Very Slightly soluble in alkali. Soluble in hot KOH or NaOH solutions. Insoluble in ethanol. Insoluble in acids except Hydrofluoric Acid.

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Section 10. Stability and Reactivity Data

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

Section 11. Toxicological Information

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): >15000 mg/kg [Rat (IUCLID Dataset)]. Acute dermal toxicity (LD50): >2000 mg/kg [Rabbit (IUCLID Dataset)]. 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. May cause damage to the following organs: upper respiratory tract, eyes.
Other Toxic Effects on Humans	Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	> 5000 oral LD50 Rat
Special Remarks on Chronic Effects on Humans	May cause cancer based on animal test data
Special Remarks on other Toxic Effects on Humans	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: Inhalation of dust may cause dryness and irritation to mucous membranes and respiratory tract in case of severe exposure. Chronic exposure may affect respiratory system (pneumoconiosis, interstitial pulmonary fibrosis, bronchoilitis obliterans). Symptoms include coughing and difficulty breathing and shortness of breath. Ingestion: May be harmful if swallowed in large amounts. However, no adverse effects are expected for numeral industrial handling. 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 occuring forms of amorphous silica that frequently contain crystalline forms. Epidemiological studies indicate a low potential for health effects.

Section 12. Ecological Information

Ecotoxicity	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 (Ceriodaphpnia dubia)].
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.

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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)

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 birth defects 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 cancer which would require a warning under the statute: No products were found.
Minnesota: Silica gel
Massachusetts RTK: Silica gel
New Jersey: Silica gel
TSCA 8(b) inventory: Silica gel (silica)

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

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
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..

Other Classifications

WHMIS (Canada)

Not controlled under WHMIS (Canada).

DSCL (EEC)

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.)

WHMIS (Canada) (Pictograms)

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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 **SL054**

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 7/2/2012.

Verified by Sonia Owen.

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