



Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Sample Name: Silica Gel
Company ID: Molecular Tek, Inc.
Address: 350 W Brazos Avenue, #1343, West Columbia, TX 77486 USA

Emergency Phone Number: 504-517-6223

Passed ISO9001 Certification
Passed ISO14001 Environmental Management Systems

Section 2 - Hazards Identification

Emergency Overview

CAUTION: May cause irritation to skin, eyes, and respiratory tract.

Saf-T-Data Rating

Health Rating: 2 - Moderate
Flammability Rating: 1 - Slight
Reactivity Rating: 1 - Slight
Contact Rating: 2 - Moderate
Lab Protective Equipment: goggles, lab coat, vent hood, proper gloves
Storage Color Code: Green (general storage)

Potential Health Effects

The product contains synthetic amorphous silica, not to be confused with crystalline silica such as quartz, cristobalite, tridymite, diatomaceous earth, or other naturally occurring forms of amorphous silica that frequently contain crystalline forms.

Ingestion: May cause dryness and irritation to mucous membrane, nose, and throat. Symptoms may include coughing, sore throat, and wheezing.

Ingestion: No adverse effects expected.

Skin Contact: May cause irritation with dryness and abrasion.

Eye Contact: May cause irritation, redness, and pain.

Chronic Exposure: Repeated exposure may cause symptoms similar to the listed acute effects. Synthetic amorphous silica does not produce silicosis.

Aggravation of Preexisting Conditions: No information found.

Section 3 - Composition Information of Ingredients

Description: Silica Gel
Dangerous Substance: Not Present
CAS Number: 1343-98-2

Section 4 - First Aid Measures

Inhalation: Seek fresh air and get medical attention for any difficulty breathing.

Ingestion: Consume several glasses of water to dilute. If large amounts were swallowed, seek medical attention for advice.

Skin Contact: Immediately rinse skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothes and thoroughly clean before wearing again. Seek medical attention if irritation develops.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek medical attention if irritation persists.

Section 5 - Fire Fighting Measures

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Information: Use protective clothing and breathing equipment appropriate for the surrounding fire.

Section 6 - Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. In case of spills, sweep up and place in appropriate containers for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

Section 7 - Handling and Storage

Keep in a tightly closed container and store in a cool, dry, ventilated area. Protect against physical damage. When pouring into a container of flammable liquid, ground both containers electrically to prevent a spark of static electricity. Containers of this material may be hazardous

when empty since they retain product residues (dusts, solids); observe all warnings and precautions listed for this product.

Section 8 - Exposure Controls, Personal Protection

Airborne Exposure Limits:

Silica (synthetic, amorphous) - OSHA Permissible Exposure Limit (PEL) - 80/(%SiO₂) mg/m³ (TWA) for amorphous silica, including natural diatomaceous earth.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, a half-face piece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protectives gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9 - Physical and Chemical Properties

Form: Solid

Color: White

Odor: Odorless

pH: 3-8 (in 5% slurry)

Solubility: Insoluble (water 20°C)

Density: 0.5~0.8 g/m³

Boiling Point/Range: 2,230°C (4,046°F)

Melting Point/Range: 1,610°C (2,930°F)

Decomposition Temperature: Not applicable
Ignition Temperature: Not applicable
Vapor Density (air=1): Not applicable
Vapor Pressure (mm Hg): Not applicable
Evaporation Rate (BuAc=1): No information found

Section 10 - Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Oxides of carbon and silicon may be formed when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: Reacts with hydrogen fluoride, oxygen difluoride, chlorine trifluoride, strong acids, strong bases, and oxidizers.

Conditions to Avoid: Moisture, extreme heat, and incompatibilities.

Section 11 - Toxicological Information

No LD50/LC50 information found relating to routes of occupational exposure.

Cancer Lists

NTP Carcinogen

Ingredient	Known	Anticipated	IARC Category
Silica Gel (63231-67-4)	No	No	None

Section 12 - Ecological Information

Environmental Fate: When released into the soil, this material is not expected to biodegrade. When released into water, this material is not expected to biodegrade.

Environmental Toxicity: This material is not expected to be toxic to aquatic life.

Section 13 - Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal

disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements.

Section 14 - Transport Information

Not regulated

Section 15 - Regulatory Information

Chemical Inventory Status - Part 1

Ingredient	TSCA	EC	Japan	Australia
Silica Gel (62321-67-4)	Yes	No	No	Yes

Chemical Inventory Status - Part 2

Ingredient	Korea	Canada DSL	NDSL	Philippines
Silica Gel (62321-67-4)	Yes	No	No	Yes

Federal, State, & International Regulations - Part 1

SARA 203 - SARA 313

Ingredient	RQ	TPQ	List	Chemical Category
Silica Gel (62321-67-4)	No	No	No	No

Federal, State, & International Regulations - Part 2

RCRA - TSCA

Ingredient	CERCLA	261.33	8(d)
Silica Gel (62321-67-4)	No	No	No

Chemical Weapons Convention	TSCA	CDTA
No	No	No

SARA 311/312

Acute	Chronic	Fire	Pressure	Reactivity
Yes	Yes	No	No	No (pure/solid)

Australian Hazchem Code: None allocated

Poison Schedule: None allocated

WHMIS: This SDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

Issue Time: 2015-05-06

Issue Department: Technical Department

Date Review Unit: 2015-05-08

Modification Record: 2015-05-18

Other Information

Regional Representation: This information is given on the authorized Safety Data Sheet for your country.

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