

Material Safety Data Sheet

VICTORIA'S SILICA GEL VSG2

MSDS No. _____

Date of Preparation: September 15, 2003

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Victoria's Silica Gel VSG2
Chemical Formula: N/A
CAS Number: 7631-86
CAS Number: 7646-79-9-9
Other Designations: Blend
General Use: Preservative for fresh cut flowers.
Manufacturer: Syndicate Sales, Inc., 2025 N. Wabash Street, Kokomo, IN 46903-0756, Phone (765) 457-7277

Section 2 - Composition / Information on Hazardous Ingredients

Ingredient Name	Exposure Limits	CAS Number	% wt or % vol.
Amorphous Silica	NIOSH REL: TWA 6 mg/m ³ ACGIH TLV: 10 mg/m ³ OSHA PEL TWA: 20 mppcf (80mg/m ³ /% SiO ²) OSHA IDLH: 3,000 mg/m ³	7631-86-9	80-95%
Cobalt Chloride	ACGIH TLV (as Co): 0.02 mg/m ³	7646-79-9	< 1.0%

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Potential Health Effects

Primary Entry Routes: Inhalation of dust, skin and/or eye contact, ingestion.
Target Organs: Eyes, respiratory system
Acute Effects: Irritation to eyes, breathing dust can cause upper respiratory irritation/possible asthmatic effects
Inhalation: Irritation to nose, throat, cough, shortness of breath
Eye: Irritation and redness
Skin: Irritation and redness
Ingestion: Swallowing this product may be harmful. Can cause irritation abdominal pain, diarrhea, nausea and vomiting.
Carcinogenicity: May be carcinogenic to humans. Avoid ingesting or breathing dust.
Chronic Effects from Long-Term Exposure: Skin sensitization, asthma, lung fibrosis, may have effects on the heart.

HMIS	
H	1
F	0
R	0
PPE†	

Section 4 - First Aid Measures

Inhalation of Dust: Remove to fresh air.
Eye Contact: Irrigate immediately
Skin Contact: Wash with soap and water thoroughly.
Ingestion: Do not induce vomiting. Refer for medical attention.
Note to Physicians: N/A
Special Precautions/Procedures: N/A

Section 5 - Fire-Fighting Measures

Flash Point: > 160 degrees Fahrenheit
Flash Point Method: Pensky-Martens Closed-Cup
Burning Rate: N/D
Autoignition Temperature: N/D
LEL: N/A
UEL: N/A
Flammability Classification: Not regulated
Extinguishing Media: N/D
Unusual Fire or Explosion Hazards: N/A
Hazardous Combustion Products: N/D
Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: N/D**Section 6 - Accidental Release Measures****Spill/Leak Procedures:** Do not re lease into the environment (sewers, groundwater or waterways)**Small Spills:** Sweep-up, if necessary, moisten to prevent dust release and dispose of properly.**Large Spills:** Follow recommendations for small spills. Do not release into the environment.**Containment:** Remove to a safe place away from food storage and where children play until disposed properly.**Cleanup:** Dispose of spill residue properly.**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.1200), EPA Regulations (40 CFR 355), applicable state regulations.**Section 7 - Handling and Storage****Handling Precautions:** Avoid contact with skin and eyes. Avoid breathing dust.**Storage Requirements:** Do not store near food area or where children play.**Regulatory Requirements:** N/D**Section 8 - Exposure Controls / Personal Protection****Engineering Controls:****Ventilation:** N/A**Administrative Controls:** N/A**†Respiratory Protection:** No respiratory equipment is needed during normal usage. Conditions resulting in high dust generation would require respiratory protection. Follow OSHA respirator regulations (29 CFR 1910.134) and NIOSH respirator recommendations for amorphous silica (see *Pocket Guide to Chemical Hazards*). If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.**Protective Clothing/Equipment:** Chemically protective gloves, safety glasses.**Safety Stations:** N/A**Contaminated Equipment:** N/A**Comments:** N/A**Section 9 - Physical and Chemical Properties****Physical State:** Solid**Appearance and Odor:** Odorless**Odor Threshold:** N/D**Vapor Pressure:** N/D**Vapor Density (Air=1):** N/D**Formula Weight:** N/A**Density:** 0.93 gm./ml.**Specific Gravity (H₂O=1, at 4 °C):** N/D**Water Solubility:** Insoluble**10% pH:** 2.6**Other Solubilities:** N/D**Boiling Point:** N/D**Freezing/Melting Point:** N/D**Viscosity:** N/A**Refractive Index:** N/D**Surface Tension:** N/D**Evaporation Rate:** N/D**% Volatile:** 1.6%**Total Solids:** 98.4%**Section 10 - Stability and Reactivity****Stability:** Victoria's Silica Gel is stable at room temperature in closed containers under normal storage and handling conditions.**Polymerization:** Not determined but very unlikely.**Chemical Incompatibilities:** Flourine, oxygen difluoride, chlorine trifluoride, alkali metals such as potassium or sodium.**Conditions to Avoid:** N/D**Hazardous Decomposition Products:** N/D

Section 11- Toxicological Information**Registry of Toxic Effects of Chemical Substances (RTECS) Toxicity Data:****Eye:** No Data**Skin:** No data**Ingestion:** Cobalt Chloride-Lowest published Oral Dose adult man-1,042 mg/kg/13 week intermittent)

Amorphous Silica – No data

Inhalation: No data**Acute Inhalation Effects:** N/D**Acute Oral Effects:** Cobalt Chloride- Optic Nerve Neuropathy, Visual Field Changes

Amorphous Silica -N/D

Chronic Effects: N/D**Carcinogenicity:** Cobalt Chloride "Tumorigen"

Amorphous Silica: N/D

Mutagenicity: Cobalt Chloride "Mutagen"

Amorphous Silica: N/D

Teratogenicity: Cobalt Chloride-"Reproductive Effector"

Amorphous Silica: N/D

Section 12 - Ecological Information**Ecotoxicity:** Amorphous Silica N/D, Cobalt Chloride- Toxic to aquatic organisms.**Environmental Fate:** N/D**Environmental Degradation:** N/D**Soil Absorption/Mobility:** N/D**Section 13 - Disposal Considerations****Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.**Disposal Regulatory Requirements:** N/D**Container Cleaning and Disposal:** N/D**Section 14 - Transport Information****DOT Transportation Data (49 CFR 172.101):****Shipping Name:** N/D**Shipping Symbols:** N/A**Hazard Class:** 4.1**ID No.:** UN1346**Packing Group:** 111**Label:** 4.1**Special Provisions (172.102):**

Single packagings not permitted on passenger aircraft.

Packaging Authorizations**a) Exceptions:** None**b) Non-bulk Packaging:** 49 CFR 173.213**c) Bulk Packaging:** 49 CFR 173.240**Quantity Limitations****a) Passenger, Aircraft, or Railcar:** 25 kg**b) Cargo Aircraft Only:** 100 kg**Vessel Stowage Requirements****a) Vessel Stowage:** A**b) Other:** N/D**Section 15 - Regulatory Information****EPA Regulations:**

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261.20): Non-Hazardous

CERCLA Hazardous Substance (40 CFR 302.4) Cobalt

CERCLA Reportable Quantity (RQ), Cobalt 100 lbs

SARA 311/312 Codes: N/D

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355):

TSCA Reporting Status: Exempt

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-3): Cobalt, Amorphous Silica

State Regulations: Florida: Listed as a toxic substance (amorphous silica)

Massachusetts: Listed as hazardous substance. Refer to: OSHA 29CFR1910.1000-subpart Z, ACGIH, NFPA, "Dust Producer" designation.

Minnesota: Hazardous Substance, carcinogenic. Refer to: ACGIH, NIOSH, OSHA, IARC.

Section 16 - Other Information

Prepared By: Mary Dunlap and Mack Overton

Revision Notes: September 15, 2003

Additional Hazard Rating Systems: N/A

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