

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.11.2015**Silica Gel****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Silica Gel**Manufacturer/Supplier Article number:** SG6030SS**Recommended uses of the product and restrictions on use:** Laboratory chemicals**Manufacturer Details:**

AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover, PA 17331
1-717-632-1291

Emergency telephone number:**ChemTel: (24-hour)**

+1(800)255-3924

+1(813)248-0585 (International)

SECTION 2: Hazards identification**Classification of the substance or mixture:****Irritant**

Acute toxicity (oral, dermal, inhalation), category 4
Skin sensitization, category 1

**Health hazard**

Respiratory sensitization, category 1
Germ cell mutagenicity, category 2
Carcinogenicity, category 1B
Chronic hazards to the aquatic environment, category 1

AcTox. Oral 4.

Resp. Sens. 1.

Skin. Sens 1.

Germ. Muta. 2.

Carcin. 1B.

Aq. AcTox. 1.

Aq. ChrTox. 1.

Signal word: Danger**Hazard statements:**

Harmful if swallowed.

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Suspected of causing genetic defects.

May cause cancer.

Very toxic to aquatic life with long lasting effects.

Precautionary statements:

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.11.2015**Silica Gel**

Avoid breathing dust/fume/gas/mist/vapors/spray.
 Wash skin thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Contaminated work clothing should not be allowed out of the workplace.
 Avoid release to the environment.
 Wear protective gloves/protective clothing/eye protection/face protection.
 In case of inadequate ventilation wear respiratory protection.
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 IF ON SKIN: Wash with soap and water.
 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
 IF exposed or concerned: Get medical advice/attention.
 If skin irritation or a rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 Collect spillage.
 Store locked up.
 Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None**SECTION 3: Composition/information on ingredients****Ingredients:**

Ingredients:		
CAS 7646-79-9	Cobalt Dichloride	>99 %
CAS 1343-98-2	Silica Gel, Indicating	<1 %
Percentages are by weight		

SECTION 4: First aid measures**Description of first aid measures****After inhalation:**

Seek medical assistance. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing.

After swallowing:

Immediately seek medical attention. Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Dilute with water.

Most important symptoms and effects, both acute and delayed:

Blood disorders, Cough, Vomiting. Irritation. Shortness of breath. Headache. Nausea. Dizziness. Pulmonary function Asthma Myocardial effects Substances for which there is BEI®. Confirmed animal carcinogen with unknown relevance to humans varies. Stomach - Irregularities - Based on Human Evidence.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.11.2015**Silica Gel****Indication of any immediate medical attention and special treatment needed:**

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures**Extinguishing media****Suitable extinguishing agents:**

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents: None**Special hazards arising from the substance or mixture:**

Hygroscopic. Combustible dust formation is a risk. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:**Protective equipment:**

Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Avoid dust generation. Remove heat, sparks, and all sources of ignition. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes and clothing.

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures:**

Use explosion proof equipment. Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Pick up and arrange disposal without creating dust. Sweep up and shovel. Wear protective eyewear, gloves, and clothing. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Refer to Section 8.

Reference to other sections: None**SECTION 7: Handling and storage****Precautions for safe handling:**

Avoid dust generation. Remove heat, sparks, and all sources of ignition. Avoid contact with skin, eyes and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Do not eat, drink, smoke, or use personal products when handling chemical substances. Refer to Section 13.

Conditions for safe storage, including any incompatibilities:

Moisture sensitive. Store contents under inert gas. Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.11.2015

Silica Gel

Control parameters:	7646-79-9, Cobalt dichloride , TWA 0.020000 mg/m ³ USA. ACGIH.
Appropriate engineering controls:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.
Respiratory protection:	Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.
Protection of skin:	Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.
Eye protection:	Face shield and safety glasses are appropriate eye protection. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
General hygienic measures:	Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Before re-wearing, wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	White granules/beads	Explosion limit lower:	Not determined
		Explosion limit upper:	Not determined
Odor:	Odorless	Vapor pressure at 20°C:	100 hPa at 818 °C
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	5.5 - 9.0 (in 5% slurry)	Relative density:	3.370 g/cm ³
Melting/Freezing point:	724 °C	Solubilities:	Insoluble, Chloride may leach out
Boiling point/Boiling range:	1,049 °C at 1,013 hPa	Partition coefficient (n-octanol/water):	log pow: 0.85
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity**Reactivity:**

Nonreactive under normal conditions.

Chemical stability:

Hygroscopic. Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.11.2015**Silica Gel**

Dust generation. Moisture sensitive. Combustible dust formation is a risk. Incompatible materials.

Incompatible materials:

Oxidizing agents, Alkali metals.

Hazardous decomposition products:

Hydrogen chloride gas, Cobalt/cobalt oxides.

SECTION 11: Toxicological information**Acute Toxicity:** No additional information.**Chronic Toxicity:** No additional information.**Skin corrosion/irritation:** No additional information.**Serious eye damage/irritation:**

Eyes - Rabbit Result: Risk of serious damage to eyes. 7646-79-9.

Respiratory or skin sensitization: No additional information.**Carcinogenicity:****7646-79-9:** 2B - Group 2B: Possibly carcinogenic to humans (Cobalt dichloride)**Germ cell mutagenicity:**

Human HeLa cell DNA inhibition

Reproductive Toxicity:

No data available Reproductive toxicity - Mouse - Oral Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count). Paternal Effects: Testes, epididymis, sperm duct. Effects on Fertility: Male fertility index (e.g., # males impregnating females per # males exposed to fertile nonpregnant females)

STOT-single and repeated exposure: No additional information.**Additional toxicological information:**

No additional information.

SECTION 12: Ecological information**Ecotoxicity:**

7646-79-9, LC50 - Cyprinus carpio (Carp) - 0.33 mg/l - 96 h.

7646-79-9, mortality NOEC - Daphnia (water flea) - < 0.05 mg/l - 7 d.

7646-79-9, EC50 - Daphnia magna (Water flea) - 1.1 - 1.6 mg/l - 48 h.

7646-79-9, EC50 - Chlorella vulgaris (Fresh water algae) - 0.52 mg/l - 96 h.

Persistence and degradability: No additional information.**Bioaccumulative potential:** No additional information.**Mobility in soil:** No additional information.**Other adverse effects:** No additional information.**SECTION 13: Disposal considerations****Waste disposal recommendations:**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed together with

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.11.2015**Silica Gel**

household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information**US DOT****UN Number:**

ADR, ADN, DOT, IMDG, IATA

Not regulated.

Limited Quantity Exception:

None

Bulk:**RQ (if applicable):** None**Proper shipping Name:** Not regulated.**Hazard Class:** None**Packing Group:** Not regulated.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**Non Bulk:****RQ (if applicable):** None**Proper shipping Name:** Not regulated.**Hazard Class:** None**Packing Group:** Not regulated.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**SECTION 15: Regulatory information****United States (USA)****SARA Section 311/312 (Specific toxic chemical listings):**

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

7646-79-9 Cobalt dichloride.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):**Chemicals known to cause cancer:**

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.11.2015**Silica Gel****Canada****Canadian Domestic Substances List (DSL) :**

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 2-0-0**HMIS:** 2-0-0**GHS Full Text Phrases:** None**Abbreviations and Acronyms:** None