

# Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.15.2018

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## Silica Gel, Indicating

### SECTION 1: Identification

#### Product identifier

**Product name:** Silica Gel, Indicating

**Product code:** SG6000

#### Recommended use of the product and restriction on use

**Relevant identified uses:** Laboratory chemicals

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

#### Manufacturer or supplier details

##### Manufacturer:

##### United States

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331

1-717-632-1291

#### Emergency telephone number:

##### United States

##### ChemTel Inc

+1(800)255-3924

+1(813)248-0585

### SECTION 2: Hazard identification

#### GHS classification:

Acute toxicity (oral), category 4

Skin sensitization, category 1

Respiratory sensitization, category 1

Germ cell mutagenicity, category 2

Carcinogenicity, category 1B

Acute aquatic hazard, category 1

Chronic aquatic hazard, category 1

#### Label elements

##### Hazard pictograms:



**Signal word:** Danger

#### Hazard statements:

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

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H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

### Precautionary statements:

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P285 In case of inadequate ventilation wear respiratory protection.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P281 Use personal protective equipment as required.

P273 Avoid release to the environment.

P330 Rinse mouth

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention

P321 Specific treatment (see supplemental first aid instruction on this label).

P363 Wash contaminated clothing before reuse

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P308+P313 If exposed or concerned: Get medical advice/attention

P391 Collect spillage

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

**Hazards not otherwise classified:** None

## SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7646-79-9	Cobalt chloride	<1
CAS number: 1343-98-2	Silica gel	>99

**Additional Information:** None

## SECTION 4: First-aid measures

### Description of first-aid measures

#### General notes:

Not determined or not available.

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

#### After skin contact:

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Rinse affected area with soap and water  
If symptoms develop or persist, seek medical attention

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes  
If symptoms develop or persist, seek medical attention

#### After ingestion:

Rinse mouth thoroughly  
Seek medical attention if irritation, discomfort, or vomiting persists  
Call a POISON CONTROL CENTER or seek medical attention if you feel unwell  
Do not induce vomiting  
Rinse mouth and then drink plenty of water

### Most important symptoms and effects, both acute and delayed

#### Acute symptoms and effects:

Not determined or not available.

#### Delayed symptoms and effects:

Not determined or not available.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not available.

#### Notes for the doctor:

Not determined or not available.

## SECTION 5: Fire-fighting measures

### Extinguishing media

#### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

#### Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

### Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

### Special precautions:

Carbon monoxide and carbon dioxide may form upon combustion  
Heating causes a rise in pressure, risk of bursting and combustion

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation  
Ensure air handling systems are operational  
Wear protective eye wear, gloves and clothing

### Environmental precautions:

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

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### Methods and material for containment and cleaning up:

- Wear protective eye wear, gloves and clothing
- Sweep or scoop up solid material while minimizing dust generation
- Dispose of contents / container in accordance with local regulations

### Reference to other sections:

Not determined or not applicable.

## SECTION 7: Handling and storage

### Precautions for safe handling:

- Use only with adequate ventilation.
- Avoid breathing dust.
- Do not eat, drink, smoke or use personal products when handling chemical substances.

### Conditions for safe storage, including any incompatibilities:

- Keep container tightly sealed.
- Keep container dry.
- Store in a cool, well-ventilated area.

## SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Japan	Cobalt chloride	7646-79-9	ISHL OELs - Threshold limit value: 0.02 mg/m <sup>3</sup>
	Cobalt chloride	7646-79-9	JSOH OEL: TWA: 0.05 mg/m <sup>3</sup>
Bulgaria	Cobalt chloride	7646-79-9	TWA: 0.1 mg/m <sup>3</sup>
Croatia	Cobalt chloride	7646-79-9	Maximum (8 hr) allowable concentration: 0.1 mg/m <sup>3</sup>
Czech Republic	Cobalt chloride	7646-79-9	8-hour TWA: 0.05 mg/m <sup>3</sup>
	Cobalt chloride	7646-79-9	Ceiling limit (NPK-P): 0.1 mg/m <sup>3</sup>
Estonia	Cobalt chloride	7646-79-9	8-hour TWA: 0.05 mg/m <sup>3</sup>
Hungary	Cobalt chloride	7646-79-9	8-hour TWA (ÅK Value): 0.1 mg/m <sup>3</sup>
	Cobalt chloride	7646-79-9	60-minute STEL (CK Value): 0.4 mg/m <sup>3</sup>
Lithuania	Cobalt chloride	7646-79-9	8-hour TWA: 0.05 mg/m <sup>3</sup>
Poland	Cobalt chloride	7646-79-9	8-hour TWA (NDS): 0.02 mg/m <sup>3</sup>
Slovakia	Cobalt chloride	7646-79-9	8-hour TWA (NPEL): 0.05 mg/m <sup>3</sup>
Denmark	Cobalt chloride	7646-79-9	TWA: 0.01 mg/m <sup>3</sup>
Finland	Cobalt chloride	7646-79-9	8-hour limit: 0.02 mg/m <sup>3</sup>
Greece	Cobalt chloride	7646-79-9	8-hour TWA: 0.1 mg/m <sup>3</sup>
Ireland	Cobalt chloride	7646-79-9	8-hour OEL (TWA): 0.1 mg/m <sup>3</sup>
Italy	Cobalt chloride	7646-79-9	8-hour TWA: 0.02 mg/m <sup>3</sup>
Portugal	Cobalt chloride	7646-79-9	8-hour exposure limit: 0.02 mg/m <sup>3</sup>
Spain	Cobalt chloride	7646-79-9	8-hour daily exposure limit (VLA_ED): 0.02 mg/m <sup>3</sup>

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
Sweden	Cobalt chloride	7646-79-9	Level Limit Value (NGV): 0.02 mg/m <sup>3</sup>
United Kingdom	Cobalt chloride	7646-79-9	TWA: 0.1 mg/m <sup>3</sup>
Brazil	Cobalt chloride	7646-79-9	8-Hour Exposure Limit (TLV-TWA): 0.02 mg/m <sup>3</sup>
ACGIH	Cobalt chloride	7646-79-9	8-Hour Exposure Limit (TLV-TWA): 0.02 mg/m <sup>3</sup>
Canada	Cobalt chloride	7646-79-9	Alberta OELs - 8-Hour TWA Exposure Limit: 0.02 mg/m <sup>3</sup>
	Cobalt chloride	7646-79-9	British Columbia OELs - 8-Hour TWA Exposure Limit: 0.02 mg/m <sup>3</sup>
	Cobalt chloride	7646-79-9	Manitoba OELs - 8-hour Exposure Limit (TLV-TWA): 0.02 mg/m <sup>3</sup>
	Cobalt chloride	7646-79-9	Ontario OELs - 8-Hour TWA Exposure Limit: 0.02 mg/m <sup>3</sup>
	Cobalt chloride	7646-79-9	Quebec OELs - 8-Hour TWA Exposure Value: 0.02 mg/m <sup>3</sup>
	Cobalt chloride	7646-79-9	Saskatchewan OELs - 8 Hour Average Contamination Limit: 0.02 mg/m <sup>3</sup>
	Cobalt chloride	7646-79-9	Saskatchewan OELs - 15 Minute Average Contamination Limit: 0.06 mg/m <sup>3</sup>
Mexico	Cobalt chloride	7646-79-9	NOM-010-STPS-2014: Time Weighted Average Exposure Limit Value (VLE-PPT): 0.02 mg/m <sup>3</sup>

#### Biological limit values:

No biological exposure limits noted for the ingredient(s).

#### Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

#### 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.

#### Personal protection equipment

##### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

##### Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

##### Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

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### General hygienic measures:

- Avoid contact with skin, eyes and clothing.
- Wash hands before breaks and at the end of work.
- Wash contaminated clothing before reuse.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance (physical state, color):</b>	Blue solid
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined or not available.
<b>pH-value:</b>	5.5 - 9.0 (in 5% slurry)
<b>Melting/Freezing point:</b>	724°C
<b>Boiling point/range:</b>	1,049°C at 1,013 hPa
<b>Flash point:</b>	Not applicable.
<b>Evaporation rate:</b>	Not determined or not available.
<b>Flammability (solid, gaseous):</b>	Not determined or not available.
<b>Explosion limit upper:</b>	Not determined or not available.
<b>Explosion limit lower:</b>	Not determined or not available.
<b>Vapor pressure:</b>	100 hPa at 818°C
<b>Vapor density:</b>	Not determined or not available.
<b>Density:</b>	Not determined or not available.
<b>Relative density:</b>	3.370 g/cm <sup>3</sup>
<b>Solubilities:</b>	Insoluble, chloride may leach out.
<b>Partition coefficient (n-octanol/water):</b>	log Pow: 0.85
<b>Auto/Self-ignition temperature:</b>	Not determined or not available.
<b>Decomposition temperature:</b>	Not determined or not available.
<b>Dynamic viscosity:</b>	Not determined or not available.
<b>Kinematic viscosity:</b>	Not determined or not available.
<b>Explosive properties</b>	Not determined or not available.
<b>Oxidizing properties</b>	Not determined or not available.

### Other information

## SECTION 10: Stability and reactivity

### Reactivity:

Does not react under normal conditions of use and storage.

### Chemical stability:

Hygroscopic. Stable under normal conditions.

### Possibility of hazardous reactions:

None under normal conditions of use and storage.

### Conditions to avoid:

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

### Incompatible materials:

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Oxidizing agents, Alkali metals.

#### Hazardous decomposition products:

Hydrogen chloride gas, Cobalt/cobalt oxides.

### SECTION 11: Toxicological information

#### Acute toxicity

**Assessment:** Harmful if swallowed

**Product data:** No data available.

**Substance data:**

Name	Route	Result
Cobalt chloride	oral	LD50 - Rat - 418 mg/kg

#### Skin corrosion/irritation

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Serious eye damage/irritation

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Respiratory or skin sensitization

**Assessment:** May cause an allergic skin reaction May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Product data:** No data available.

**Substance data:**

Name	Result
Cobalt chloride	May cause an allergic skin reaction.
	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### Carcinogenicity

**Assessment:** May cause cancer

**Product data:** No data available.

**Substance data:**

Name	Species	Result
Cobalt chloride		May cause cancer.

#### International Agency for Research on Cancer (IARC):

Name	Classification
Cobalt chloride	Group 2B

#### National Toxicology Program (NTP):

Name	Classification
Cobalt chloride	Reasonably anticipated to be human carcinogens

#### Germ cell mutagenicity

**Assessment:** Suspected of causing genetic defects

**Product data:** No data available.

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#### Substance data:

Name	Result
Cobalt chloride	Suspected of causing genetic defects.

#### Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

#### Substance data:

Name	Result
Cobalt chloride	May damage fertility or the unborn child.

#### Specific target organ toxicity (single exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Specific target organ toxicity (repeated exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

### SECTION 12: Ecological information

#### Acute (short-term) toxicity

**Assessment:** Very toxic to aquatic life

**Product data:** No data available.

**Substance data:** No data available.

#### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

#### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

#### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

#### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.



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**Other adverse effects:** No data available.

### SECTION 13: Disposal considerations

#### Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

### SECTION 14: Transport information

#### Canadian Transportation of Dangerous Goods (TDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

#### International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

#### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

### SECTION 15: Regulatory information

#### Canada regulations

##### Domestic substances list (DSL):

1343-98-2	Silica gel	Listed
7646-79-9	Cobalt chloride	Listed

**Non-domestic substances list (NDSL):** Not determined.

### SECTION 16: Other information

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**Abbreviations and Acronyms:** None

**Disclaimer:**

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**NFPA:** 2-0-0

**HMIS:** 2-0-0-X

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**End of Safety Data Sheet**