

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.15.2018

Page 1 of 10

Silica Gel, Indicating

SECTION 1: Identification

Product identifier

Product name: Silica Gel, Indicating

Product code: S25520

Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable.

Uses advised against: Not determined or not applicable.

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

Manufacturer or supplier details

Manufacturer:

AquaPhoenix Scientific
860 Gitts Run Road
Hanover
PA 17331
(717) 632-1291

Supplier:

Fisher Science Education
6771 Silver Crest Road
Nazareth
PA 18064
800 955-1177

Emergency telephone number:

United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard(s) 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.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.15.2018

Page 2 of 10

Silica Gel, Indicating

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 applicable.

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:

- 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

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.15.2018

Page 3 of 10

Silica Gel, Indicating

If symptoms develop or persist, seek medical attention

After swallowing:

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 applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting 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

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.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.15.2018

Page 4 of 10

Silica Gel, Indicating

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 ³
	Cobalt chloride	7646-79-9	JSOH OEL: TWA: 0.05 mg/m ³
Bulgaria	Cobalt chloride	7646-79-9	TWA: 0.1 mg/m ³
Croatia	Cobalt chloride	7646-79-9	Maximum (8 hr) allowable concentration: 0.1 mg/m ³
Czech Republic	Cobalt chloride	7646-79-9	8-hour TWA: 0.05 mg/m ³
	Cobalt chloride	7646-79-9	Ceiling limit (NPK-P): 0.1 mg/m ³
Estonia	Cobalt chloride	7646-79-9	8-hour TWA: 0.05 mg/m ³
Hungary	Cobalt chloride	7646-79-9	8-hour TWA (ÁK Value): 0.1 mg/m ³
	Cobalt chloride	7646-79-9	60-minute STEL (CK Value): 0.4 mg/m ³
Lithuania	Cobalt chloride	7646-79-9	8-hour TWA: 0.05 mg/m ³
Poland	Cobalt chloride	7646-79-9	8-hour TWA (NDS): 0.02 mg/m ³
Slovakia	Cobalt chloride	7646-79-9	8-hour TWA (NPEL): 0.05 mg/m ³
Denmark	Cobalt chloride	7646-79-9	TWA: 0.01 mg/m ³
Finland	Cobalt chloride	7646-79-9	8-hour limit: 0.02 mg/m ³
Greece	Cobalt chloride	7646-79-9	8-hour TWA: 0.1 mg/m ³
Ireland	Cobalt chloride	7646-79-9	8-hour OEL (TWA): 0.1 mg/m ³
Italy	Cobalt chloride	7646-79-9	8-hour TWA: 0.02 mg/m ³
Portugal	Cobalt chloride	7646-79-9	8-hour exposure limit: 0.02 mg/m ³
Spain	Cobalt chloride	7646-79-9	8-hour daily exposure limit (VLA_ED): 0.02 mg/m ³
Sweden	Cobalt chloride	7646-79-9	Level Limit Value (NGV): 0.02 mg/m ³
United Kingdom	Cobalt chloride	7646-79-9	TWA: 0.1 mg/m ³
Brazil	Cobalt chloride	7646-79-9	8-Hour Exposure Limit (TLV-TWA): 0.02 mg/m ³
ACGIH	Cobalt chloride	7646-79-9	8-Hour Exposure Limit (TLV-TWA): 0.02 mg/m ³
Canada	Cobalt chloride	7646-79-9	Alberta OELs - 8-Hour TWA Exposure Limit: 0.02 mg/m ³

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.15.2018

Page 5 of 10

Silica Gel, Indicating

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Cobalt chloride	7646-79-9	British Columbia OELs - 8-Hour TWA Exposure Limit: 0.02 mg/m ³
	Cobalt chloride	7646-79-9	Manitoba OELs - 8-hour Exposure Limit (TLV-TWA): 0.02 mg/m ³
	Cobalt chloride	7646-79-9	Ontario OELs - 8-Hour TWA Exposure Limit: 0.02 mg/m ³
	Cobalt chloride	7646-79-9	Quebec OELs - 8-Hour TWA Exposure Value: 0.02 mg/m ³
	Cobalt chloride	7646-79-9	Saskatchewan OELs - 8 Hour Average Contamination Limit: 0.02 mg/m ³
	Cobalt chloride	7646-79-9	Saskatchewan OELs - 15 Minute Average Contamination Limit: 0.06 mg/m ³
Mexico	Cobalt chloride	7646-79-9	NOM-010-STPS-2014: Time Weighted Average Exposure Limit Value (VLE-PPT): 0.02 mg/m ³

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.

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

Appearance	Blue solid
Odor	Odorless

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.15.2018

Page 6 of 10

Silica Gel, Indicating

Odor threshold	Not determined or not available.
pH	5.5 - 9.0 (in 5% slurry)
Melting point/freezing point	724°C
Initial boiling point/range	1,049°C at 1,013 hPa
Flash point (closed cup)	Not applicable.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	100 hPa at 818°C
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	3.370 g/cm ³
Solubilities	Insoluble, chloride may leach out.
Partition coefficient (n-octanol/water)	log Pow: 0.85
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	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:

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

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.15.2018

Page 7 of 10

Silica Gel, Indicating

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.

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.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.15.2018

Page 8 of 10

Silica Gel, Indicating

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.

Other adverse effects: No data available.

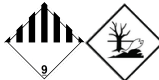
SECTION 13: Disposal considerations

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

United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s.
UN transport hazard class(es)	9 
Packing group	III

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

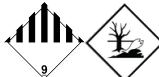
Initial preparation date: 02.15.2018

Page 9 of 10

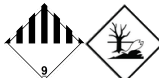
Silica Gel, Indicating

Environmental hazards	Marine Pollutant
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s.
UN transport hazard class(es)	9 
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

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

UN number	UN3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s.
UN transport hazard class(es)	9 
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

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

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

1343-98-2	Silica gel	Not Listed
7646-79-9	Cobalt chloride	Not Listed

CERCLA: Not determined.

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.15.2018

Page 10 of 10

Silica Gel, Indicating

1343-98-2	Silica gel	Not Listed
7646-79-9	Cobalt chloride	Not Listed

New Jersey Right to Know:

1343-98-2	Silica gel	Not Listed
7646-79-9	Cobalt chloride	Listed

New York Right to Know:

1343-98-2	Silica gel	Not Listed
7646-79-9	Cobalt chloride	Listed

Pennsylvania Right to Know:

1343-98-2	Silica gel	Not Listed
7646-79-9	Cobalt chloride	Listed

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. 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

Initial preparation date: 02.15.2018

End of Safety Data Sheet