

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/25/2021

Reviewed on 08/25/2021

## 1 Identification

- **Product identifier**
- **Trade name:** Silica Gel 10-18 Mesh Indicating Grade 4
- **Article number:** S1422
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Aqua Solutions, Inc.  
6913 Highway 225  
DEER PARK, TX 77536  
USA  
800-256-2586
- **Information department:**  
Technical Coordinator  
Sherman Nelson [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)
- **Emergency telephone number:**  
Chemtrec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

- Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.*
- Carc. 1B H350 May cause cancer.*
- Repr. 1B H360 May damage fertility or the unborn child.*



GHS07

- Skin Sens. 1 H317 May cause an allergic skin reaction.*

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**  
*cobalt dichloride*
- **Hazard statements**  
*May cause allergy or asthma symptoms or breathing difficulties if inhaled.*  
*May cause an allergic skin reaction.*  
*May cause cancer.*  
*May damage fertility or the unborn child.*
- **Precautionary statements**  
*Obtain special instructions before use.*

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/25/2021

Reviewed on 08/25/2021

**Trade name: Silica Gel 10-18 Mesh Indicating Grade 4**

(Contd. of page 1)

Do not handle until all safety precautions have been read and understood.  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing must not be allowed out of the workplace.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 [In case of inadequate ventilation] wear respiratory protection.  
 If on skin: Wash with plenty of water.  
 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
 IF exposed or concerned: Get medical advice/attention.  
 Specific treatment (see on this label).  
 If skin irritation or rash occurs: Get medical advice/attention.  
 If experiencing respiratory symptoms: Call a poison center/doctor.  
 Wash contaminated clothing before reuse.  
 Store locked up.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 0  
 Fire = 0  
 Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = \*0  
 Fire = 0  
 Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 112926-00-8	Precipitated silica (Silica-Amorphous)	99.7%
CAS: 7646-79-9	cobalt dichloride	0.3%

### 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:** Rinse opened eye for several minutes under running water.

· **After swallowing:** If symptoms persist consult doctor.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/25/2021

Reviewed on 08/25/2021

**Trade name: Silica Gel 10-18 Mesh Indicating Grade 4**

(Contd. of page 2)

- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

CAS: 112926-00-8	Precipitated silica (Silica-Amorphous)	18 mg/m <sup>3</sup>
CAS: 7646-79-9	cobalt dichloride	0.13 mg/m <sup>3</sup>

- **PAC-2:**

CAS: 112926-00-8	Precipitated silica (Silica-Amorphous)	200 mg/m <sup>3</sup>
CAS: 7646-79-9	cobalt dichloride	18 mg/m <sup>3</sup>

- **PAC-3:**

CAS: 112926-00-8	Precipitated silica (Silica-Amorphous)	1,200 mg/m <sup>3</sup>
CAS: 7646-79-9	cobalt dichloride	83 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

US

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/25/2021

Reviewed on 08/25/2021

**Trade name: Silica Gel 10-18 Mesh Indicating Grade 4**

(Contd. of page 3)

## 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**CAS: 112926-00-8 Precipitated silica (Silica-Amorphous)**

PEL 20mppcf or 80mg/m<sup>3</sup> /%SiO<sub>2</sub>

REL Long-term value: 6 mg/m<sup>3</sup>  
See Pocket Guide App. C

TLV TLV withdrawn

**CAS: 7646-79-9 cobalt dichloride**

PEL Long-term value: 0.1\* mg/m<sup>3</sup>  
as Co; \*for metal dust and fume

REL Long-term value: 0.05 mg/m<sup>3</sup>  
as Co; metal dust & fume

TLV Long-term value: 0.02\* mg/m<sup>3</sup>  
as Co, A3; \*inhalable; DSEN; RSEN; BEI

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/25/2021

Reviewed on 08/25/2021

Trade name: Silica Gel 10-18 Mesh Indicating Grade 4

(Contd. of page 4)

· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

**Form:** Solid granule  
**Color:** Blue to pink granular material.

· **Odor:** Odorless· **Odor threshold:** Not determined.· **pH-value:** Not applicable.· **Change in condition****Melting point/Melting range:** Undetermined.**Boiling point/Boiling range:** Undetermined.· **Flash point:** Not applicable.· **Flammability (solid, gaseous):** Not determined.· **Decomposition temperature:** Not determined.· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits:****Lower:** Not determined.**Upper:** Not determined.· **Vapor pressure:** Not applicable.· **Density:** Not determined.· **Relative density** Not determined.· **Vapor density** Not applicable.· **Evaporation rate** Not applicable.· **Solubility in / Miscibility with****Water:** Insoluble.· **Partition coefficient (n-octanol/water):** Not determined.· **Viscosity:****Dynamic:** Not applicable.**Kinematic:** Not applicable.· **Solvent content:****VOC content:** 0.00 %**Solids content:** 100.0 %

(Contd. on page 6)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/25/2021

Reviewed on 08/25/2021

**Trade name: Silica Gel 10-18 Mesh Indicating Grade 4**

(Contd. of page 5)

· **Other information** No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

CAS: 7646-79-9 cobalt dichloride

Oral LD50 500 mg/kg (ATE)

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

CAS: 112926-00-8 Precipitated silica (Silica-Amorphous)

3

CAS: 7646-79-9 cobalt dichloride

2B

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/25/2021

Reviewed on 08/25/2021

**Trade name: Silica Gel 10-18 Mesh Indicating Grade 4**

(Contd. of page 6)

- **Additional ecological information:**
- **General notes:**  
*Water hazard class 3 (Self-assessment): extremely hazardous for water  
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
 Danger to drinking water if even extremely small quantities leak into the ground.*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
*Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

· <b>UN-Number</b>	
· <b>DOT, ADN, IMDG, IATA</b>	Not regulated
· <b>UN proper shipping name</b>	
· <b>DOT, ADN, IMDG, IATA</b>	Not regulated
· <b>Transport hazard class(es)</b>	
· <b>DOT, ADN, IMDG, IATA</b>	
· <b>Class</b>	Not regulated
· <b>Packing group</b>	
· <b>DOT, IMDG, IATA</b>	Not regulated
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Not regulated

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· <b>Section 355 (extremely hazardous substances):</b>
<i>None of the ingredients is listed.</i>
· <b>Section 313 (Specific toxic chemical listings):</b>
CAS: 7646-79-9   cobalt dichloride

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/25/2021

Reviewed on 08/25/2021

Trade name: Silica Gel 10-18 Mesh Indicating Grade 4

(Contd. of page 7)

· <b>TSCA (Toxic Substances Control Act):</b>	
cobalt dichloride	ACTIVE

· <b>Hazardous Air Pollutants</b>	
CAS: 7646-79-9	cobalt dichloride

· <b>Proposition 65</b>	
· <b>Chemicals known to cause cancer:</b>	
None of the ingredients is listed.	

· <b>Chemicals known to cause reproductive toxicity for females:</b>	
None of the ingredients is listed.	

· <b>Chemicals known to cause reproductive toxicity for males:</b>	
None of the ingredients is listed.	

· <b>Chemicals known to cause developmental toxicity:</b>	
None of the ingredients is listed.	

· <b>Carcinogenic categories</b>	
· <b>EPA (Environmental Protection Agency)</b>	
None of the ingredients is listed.	

· <b>TLV (Threshold Limit Value)</b>	
None of the ingredients is listed.	

· <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>	
None of the ingredients is listed.	

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

cobalt dichloride

· **Hazard statements**

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

May cause an allergic skin reaction.

May cause cancer.

May damage fertility or the unborn child.

· **Precautionary statements**

Obtain special instructions before use.

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

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

Contaminated work clothing must not be allowed out of the workplace.

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

[In case of inadequate ventilation] wear respiratory protection.

If on skin: Wash with plenty of water.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

If skin irritation or rash occurs: Get medical advice/attention.

(Contd. on page 9)



# Safety Data Sheet

## acc. to OSHA HCS

Printing date 08/25/2021

Reviewed on 08/25/2021

**Trade name: Silica Gel 10-18 Mesh Indicating Grade 4**

(Contd. of page 8)

*If experiencing respiratory symptoms: Call a poison center/doctor.*

*Wash contaminated clothing before reuse.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

*Carcinogenic hazardous material group III (dangerous).*

· **Information about limitation of use:**

*Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.*

*Exceptions can be made by the authorities in certain cases.*

· **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

### 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Department issuing SDS:** *Environment protection department.*

· **Contact:**

· **Date of preparation / last revision**

*Revision 0.1, 08-12-2015: Corrected product name STN*

*Revision 0.0, 11-28-2016: Creation date for SDS. STN*

*Revision 1.0, updated precaution statements. STN*

*08/25/2021 / 1.0*

· **Abbreviations and acronyms:**

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*Resp. Sens. 1: Respiratory sensitisation – Category 1*

*Skin Sens. 1: Skin sensitisation – Category 1*

*Carc. 1B: Carcinogenicity – Category 1B*

*Repr. 1B: Reproductive toxicity – Category 1B*

· **\* Data compared to the previous version altered.**