Section 1

Chemical Product and Company Identification

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For laboratory and industrial use only. Not for drug, food or household use.

SILICA GEL, INDICATING **Product**

Synonyms Synthetic Amorphous Silica Gel, Indicating

Section 2 **Hazards Identification**

Signal word: DANGER

Pictograms: GHS07 / GHS08 / GHS09

Target organs: Skin, Respiratory system, Reproductive system



GHS Classification:

Skin sensitization (Category 1) Respiratory sensitization (Category 1) Carcinogenicity (Category 1B) Reproductive toxicity (Category 1B) Aquatic acute (Category 2) Aquatic chronic (Category 2)

GHS Label information: Hazard statement:

H317: May cause an allergic skin reaction.

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

H350: May cause cancer.

H360: May damage fertility or the unborn child.

H401: Toxic to aquatic life.

H411: Toxic to aquatic life with long lasting effects.

Precautionary statement:

P201: Obtain special instructions before use

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

P261: Avoid breathing dust.

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

P273: Avoid release to the environment.

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

P284: Wear respiratory protection.

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

P333+P313: If skin irritation or rash occurs: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for

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

P308+P313: IF exposed or concerned: Get medical attention.

P391: Collect spillage. P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in

accordance with local/regional/national regulations.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

| Section 3 Composition / Information on Ingredients | | | | | | | | | |
|--|----------------------------|---------------------|-------------------------|--|--|--|--|--|--|
| Chemical Name | CAS# | % | EINECS | | | | | | |
| Synthetic amorphous silica gel Cobalt chloride | 112926-00-8 7646-79-9 | 100% 0.5% | Not listed 231-589-4 | | | | | | |
| Silica gel is an amorphous form of silica, and has not bee | en defined by the U.S. Dep | artment as a hazaro | lous material. | | | | | | |

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention

SKIN ABSORPTION: MAY CAUSE AN ALLERGIC SKIN REACTION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 **Accidental Release Measures**

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Page E2 of E2 Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

| Section 8 | Exposure Controls / Personal Protection | | | | | | | | |
|------------------|---|----------------------------------|--|---|--|--|--|--|--|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) | | | | | |
| | Cobalt and inorganic compounds, as Co | TWA: 0.02 mg/m ³ (A3) | TWA: 0.1 mg/m ³ for metal dust & fume | TWA: 0.05 mg/m ³ for metal dust & fume | | | | | |

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Physical & Chemical Properties Section 9

Appearance: Solid. Desiccant. Blue granules.

Odor: No odor

Odor threshold: Data not available.

pH: Data not available

Melting / Freezing point: 1710°C (3110°F)

Boiling point: 2230°C (4046°F)

Flash point: Data not available

Evaporation rate (= 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available

Relative density (Specific gravity): 2.1 Solubility(ies): Insoluble in water. Absorbs moisture. Auto-ignition temperature: Data not available Decomposition temperature: Data not available. Viscosity: Data not available.

Marine pollutant: No

Partition coefficient: Data not available

Molecular formula: Mixture Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Moisture and high humidity.

Incompatible materials: Water, fluorine, oxygen difluoride, chlorine trifluoride.

Hazardous decomposition products: Carbon oxides, water and any materials that were absorbed by the silica gel.

Section 11 Toxicological Information

Acute toxicity: Finely ground Silica: Oral-rat LD50: >31,600 mg/kg/48H; Dermal-rabbit LD50: >2,000 mg/kg/48H; Inhalation-rat LC50: >2 mg/L/1H

Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC classified: Group 2B: Possibly carcinogenic to humans. [Cobalt and cobalt compounds]

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: Slight irritation is possible but none is expected. May cause eye, skin and mucous membrane irritation and drying.

Ingestion: May cause gastrointestinal disturbances such as nausea, vomiting and diarrhea.

Skin: Dust may cause drying of the skin. Silica gel may get hot enough to burn skin as it absorbs moisture.

Eyes: Dust and/or product may cause eye discomfort and irritation seen as tearing and reddening.

Signs and symptoms of exposure: Silica gel is a synthetic amorphous silica not to be confused with crystalline silica. Silica gel acts as a desiccant and can cause a drving

irritation of the mucous membranes and skin in cases of severe exposure. Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: GG0200000 [Cobalt chloride]

Section 12 **Ecological Information**

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Transport Information (US DOT / CANADA TDG) Section 14

UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable

Reportable Quantity: No

Exceptions: Not applicable 2016 ERG Guide # Not applicable

Section 15 **Regulatory Information**

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

| Component | TSCA | CERLCA (RQ) | RCRA code | DSL | NDSL | CA Prop 65 |
|-------------------------------|------------------|--------------------------|--------------------------|------------------|-----------|--|
| Silica gel Cobalt chloride | LIsted Listed | Not listed Not listed | Not listed Not listed | Listed Listed | NOL HOLEU | This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity. |

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook

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