

Safety Data Sheet **SILICA GEL**

SDS no. 0XKENVMP • Version 1.0 • Date of issue: 2024-07-18

SECTION 1: Identification

GHS Product identifier

Product name SILICA GEL

Other means of identification

Name	Product Code
SILICA GEL, Blue, Self- indicating, 3-8mm	ST604
SILICA GEL Self Indicating 2.0-5.0mm (4-10 Mesh) TG	ST043
SILICA GEL Self Indicating 3-8 mm TG	ST248
SILICA GEL Self Indicating 2-5mm (4-10 Mesh) LR	SL043
Silicon dioxide	
SILICA GEL Self Indicating 3-8 mm LR	SL248
Precipitated silica	
SILICA GEL Sachets 6000x2G	ST148-6000x2G

Recommended use of the chemical and restrictions on use

Dehumidifying and dehydrating agent, airconditioning, drying of compressed air and gases, catalyst, chromatography, anti-caking agent in cosmetics and pharmaceuticals, analytical and laboratory reagent.

Supplier's details

Name	ChemSupply Australia Pty Ltd
Address	38-50 Bedford Street 5013 Gillman South Australia Australia
Telephone	08 8440 2000
email	www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Carcinogenicity, Cat. 1B

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- Toxic to reproduction, Cat. 1

GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H350

May cause cancer

H360

May damage fertility or the unborn child

Precautionary statement(s)

P202

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

P280

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

P308+P313

IF exposed or concerned: Get medical advice/attention.

P501

Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 60.09

Contains traces of heavy metals. Cobalt(II) Chloride encapsulated in silica gel matrix.

Components

Component	CAS no.	Concentration
Silica Gel Dessiccant (EC no.: 215-683-2)	63231-67-4	99 % (weight)
CLASSIFICATIONS: No data available. HAZARDS: No data available.		
Cobalt (II) chloride (EC no.: 231-589-4; Index no.: 027-004-00-5)	7646-79-9	< 1 % (weight)
CLASSIFICATIONS: Carcinogenicity, Cat. 1B; Germ cell mutagenicity, Cat. 2; Toxic to reproduction, Cat. 1B; Acute toxicity, oral, Cat. 4; Respiratory sensitizer, Cat. 1; Skin sensitizer, Cat. 1; Hazardous to the aquatic environment, short-term (acute), Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 1. HAZARDS: 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 [route]; H350i - ; H360F - May damage fertility; H400 - Very toxic to aquatic life; H410 - Very toxic to aquatic life with long lasting effects. [SCLs/M-factors/ATEs]: Carc. 1B; H350i: C ≥ 0,01 %; M=10		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

First Aid Facilities: Maintain eyewash fountain in work area.

If inhaled

If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear.

In case of skin contact

Wash with plenty of soap and water. Remove contaminated clothing and wash before re-use. If irritation occurs seek medical advice.

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In case of eye contact

Irrigate with copious quantity of water for 15 minutes. Seek medical assistance if symptoms persist.

If swallowed

Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically based on judgement of doctor and individual reactions of the patient.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use measures suitable for extinguishing surrounding fire.

Specific hazards arising from the chemical

Material does not burn. Fire or heat may produce irritating, poisonous and/or corrosive gases. Containers may explode when heated. Runoff may pollute waterways.

Special protective actions for fire-fighters

Wear SCBA and structural firefighter's uniform.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid standing on spilled product as loose beads cause a slip hazard.
Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up

Do NOT touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Prevent dust cloud. Use clean non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid generation or accumulation of dusts. Wash hands and face thoroughly after working with material. Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure. Use in well ventilated areas away from all ignition sources. In case of insufficient ventilation, wear suitable respiratory equipment.

Avoid generating and inhaling dust.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Keep containers securely sealed and protected against physical damage. Keep in a well-ventilated place. Keep container dry.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Recommendation: Rubber or plastic gloves.

Body protection

Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Solid
Appearance	White or blue (self-indicating) granules or powder.
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	No data available.
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Insoluble. Solubility in Organic Solvents: Insoluble in ethanol and acids except hydrofluoric acid.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	No data available.
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous Polymerization: Will not occur.

Conditions to avoid

None under normal use conditions.

Incompatible materials

Halogen oxides, hydrogen fluoride, fluorine, oxygen trifluoride, chlorine trifluoride, oxidizers, light metals/heat, sodium/heat, xenon hexafluoride, strong acids and strong bases.

Hazardous decomposition products

Oxides of carbon and silicon may be formed when heated to decomposition.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ingestion: May be harmful if swallowed in large amounts. No adverse effects are expected for normal exposure.

Inhalation: May be harmful if inhaled. May cause dryness and irritation to mucous membranes, nose, and throat. Symptoms may include coughing, sore throat, and wheezing. May cause sensitization by inhalation.

Skin corrosion/irritation

May be harmful if absorbed through the skin. May cause irritation with dryness and abrasion. Sensitization is possible.

Serious eye damage/irritation

May cause discomfort, mild irritation, redness and pain.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available.

Carcinogenicity

Cobalt (II) chloride is evaluated in the IARC Monographs as Group 2B: Possibly carcinogenic to humans.

Cobalt (II) chloride has been revealed to be a confirmed animal carcinogen at relatively high doses. A European Commission Directive (98/98/EC) reclassified cobalt chloride as a potential carcinogen by inhalation. The International Agency for Research on Cancer (IARC) indicates there is limited evidence for carcinogenicity of cobalt (II) chloride in experimental animals, and has assigned cobalt and cobalt compounds as possibly carcinogenic to humans (group 2B).

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Cobalt dichoride - Category 1B (Safe Work Australia)

Reproductive toxicity

Cobalt dichoride - Category 1B (Safe Work Australia)

Summary of evaluation of the CMR properties

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

Chronic Effects: Repeated exposure may cause symptoms similar to those listed for acute effects. Synthetic amorphous silica does not produce silicosis.

Symptoms of an acute cobalt intoxication may include of diarrhoea, loss of appetite, drop in body temperatures, drop in blood pressure.

SECTION 12: Ecological information

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: NS

SECTION 16: Other information

Further information/disclaimer

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Preparation information

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)