

1. IDENTIFICATION

Product Name	Silica Gel White
Other Names	Silica, Crystalline - Fused; Silica, Vitreous
Uses	Used in a wide variety of industrial applications, such as desiccant.
Chemical Family	No Data Available
Chemical Formula	O ₂ Si
Chemical Name	Silica Gel White
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Pty Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not scheduled

Globally Harmonised System

Hazard Classification NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Signal Word None

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Silicon dioxide	No Data Available	7631-86-9	99.0 - 100.0 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Rinse mouth with water. Never give anything through mouth to an unconscious person. Call a POISON Centre or doctor if you feel unwell.
Eye	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Skin	Wash with soap and plenty of water. If skin irritation occurs: Get medical attention.
Inhaled	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.
Advice to Doctor	Treat symptomatically based on individual reactions of patient and judgement of doctor.
Medical Conditions Aggravated by Exposure	No information available on medical conditions which are aggravated from exposure to this product.

5. FIRE FIGHTING MEASURES

General Measures	Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.
Flammability Conditions	Not considered to be a fire hazard.
Extinguishing Media	Use extinguishing media suitable for surrounding environment.
Fire and Explosion Hazard	Not considered to be an explosion hazard.
Hazardous Products of Combustion	Oxides of carbon and silicon may be formed when heated to decomposition.
Special Fire Fighting Instructions	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available

Hazchem Code

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Avoid accidents, clean up immediately. May be slippery when spilt. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment.
Clean Up Procedures	Vacuum spilled material and place in closed plastic bags for disposal. Avoid raising dust.
Containment	Stop leak if safe to do so. Isolate the danger area.
Environmental Precautionary Measures	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.
Evacuation Criteria	Evacuate all unnecessary personnel.
Personal Precautionary Measures	Personnel involved in the clean up should wear full protective clothing as listed in section 8.

7. HANDLING AND STORAGE

Handling	No special measures necessary provided product is used correctly. If necessary - local ventilation. Take precautionary measures against electrostatic discharges. Product surface alterations caused by calcining or mixing with additives may alter toxicological properties. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product. Avoid aerosol formation. Use personal protective equipment.
Storage	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods by Road and Rail.
Container	Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC) formerly known as NOHSC. However, the exposure standard for dust not otherwise specified is 10mg/m ³ (for inspirable dust) and 3mg/m ³ (for respirable dust).
Exposure Limits	No Data Available
Biological Limits	No information available on biological limits for this product.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protection Equipment	RESPIRATOR: Wear an effective dust mask where dusts/vapours are formed and engineering controls are inadequate (AS1715/1716) EYES: Safety glasses with side shields (AS1336/1337) HANDS: Wear close-weave cotton gloves with tight wristlets (AS2161) CLOTHING: Long-sleeved, protective clothing and safety footwear (AS3765/2210)
Work Hygienic Practices	No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Powder
Odour	Odourless

Colour	White
pH	6.0 - 7.5 10% slurry
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	>1700 °C
Melting Point	>1700 °C
Freezing Point	No Data Available
Solubility	Insoluble 25°C
Specific Gravity	1.9 - 2.2
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	LogPow < 0.5
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	Water solubility: 15 - 68 mg SiO ₂ /L (20 °C) 76 - 166 mg SiO ₂ /L (37 °C)
Potential for Dust Explosion	No Data Available
Fast or Intensely Burning Characteristics	No Data Available
Flame Propagation or Burning Rate of Solid Materials	No Data Available
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No Data Available
Properties That May Initiate or Contribute to Fire Intensity	No Data Available
Reactions That Release Gases or Vapours	No Data Available
Release of Invisible Flammable Vapours and Gases	No Data Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions of use.
Conditions to Avoid	Avoid excessive heat, direct sunlight, generating dust, moisture, static discharges and high temperatures.
Materials to Avoid	Strong bases, oxidizers, hydrogen fluoride, fluorine, xenon hexafluoride, oxygen difluoride, and chlorine trifluoride. Substance can explode when wet and heated with magnesium. Oxides of carbon and silicon may be formed when heated to decomposition.

Hazardous Decomposition Products**Hazardous Polymerisation** Has not been reported.**11. TOXICOLOGICAL INFORMATION****General Information**Oral, LD50 : >3100 – >20000 mg/kg
Dermal, LD50: >5000 mg/kg

Germ cell mutagenicity: No mutagenic or clastogenic activity either in vitro or in vivo in standard test systems.

Reproductive toxicity: Based on the weight of evidence, prolonged exposure to synthetic amorphous silica, applied before and during pregnancy at high doses, is not expected to produce harmful effects on the reproductive performance or embryonic/foetal development in experimental animals.

Carcinogenicity: Based on the negative results after long-term oral administration of synthetic amorphous silica (up to 5 % in the diet given to rats and mice), there is no evidence of a carcinogenic potential arising from ingestion of synthetic amorphous silica.

Eye/Irritant

Slight transient irritation to the eye conjunctivae that occurred in experiments is not relevant for classification.

Ingestion

Not a health hazard under normal use conditions.

Inhalation

No experimental animal data are available. Given the structure and physico-chemical properties and abundance of silicon dioxide in nature, synthetic amorphous silica is not expected to cause skin or respiratory sensitisation.

Skin/Irritant

Not irritating to skin, but may produce skin dryness following prolonged and repeated exposure due to the desiccative and defatting property of amorphous silica.

Carcinogen Category

No Data Available

12. ECOLOGICAL INFORMATION**Ecotoxicity**

This material is not expected to be toxic to aquatic life.

Persistence/Degradability

Silicon dioxide is an inorganic, stable /inert compound which is not biologically transformed. It is not photo degradable in air, water and soil.

Mobility

No information available on mobility for this product.

Environmental Fate

Avoid contaminating drains, sewers and waterways.

Bioaccumulation PotentialSilicas do not bioaccumulate, however, they appear as complex silicate minerals in soils and sediments, as the oxide (silica, SiO₂) in crystalline form in rocks, soils and sand, and as biogenic silica in organisms such as diatoms, radiolarians or silicoflagellates and in plants such as grass, rushes, rice or sugar cane.**Environmental Impact**

No Data Available

13. DISPOSAL CONSIDERATIONS**General Information**

Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

Special Precautions for Land Fill

Contact a specialist disposal company or the local waste regulator for advice. Incinerate at an approved site following all local regulations. This material may be suitable for approved landfill.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	SILICA GEL WHITE
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Land Transport (China)

Proper Shipping Name	SILICA GEL WHITE
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Land Transport (Malaysia)

ADR

Proper Shipping Name	SILICA GEL WHITE
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	SILICA GEL WHITE
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name	SILICA GEL WHITE
Class	No Data Available
Subsidiary Risk(s)	No Data Available

	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	SILICA GEL WHITE
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No

Air Transport

IATA DGR

Proper Shipping Name	SILICA GEL WHITE
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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15. REGULATORY INFORMATION

General Information	Classified as non-hazardous according to the criteria of The Australian Safety and Compensation Council (ASCC) formerly known as NOHSC.
Poisons Schedule (Aust)	Not scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	Not Hazardous
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National/Regional Inventories

Australia (AICS)	Listed
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Canada (DSL)	Listed
Canada (NDSL)	Not Determined
China (IECSC)	Listed
Europe (EINECS)	231-545-4
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Listed
Korea (KECI)	Listed
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Listed

16. OTHER INFORMATION

Related Product Codes	SILGEL1600, SILGEL1610, SILGEL1802, SILGEL2200, SILGEL2800, SILGEL9900
Revision	2
Revision Date	25 May 2016
Key/Legend	<p>< Less Than > Greater Than AICS Australian Inventory of Chemical Substances atm Atmosphere CAS Chemical Abstracts Service (Registry Number) cm² Square Centimetres CO₂ Carbon Dioxide COD Chemical Oxygen Demand deg C (°C) Degrees Celcius EPA (New Zealand) Environmental Protection Authority of New Zealand deg F (°F) Degrees Farenheit g Grams g/cm³ Grams per Cubic Centimetre g/l Grams per Litre HSNO Hazardous Substance and New Organism IDLH Immediately Dangerous to Life and Health immiscible Liquids are insoluable in each other. inHg Inch of Mercury inH₂O Inch of Water K Kelvin kg Kilogram kg/m³ Kilograms per Cubic Metre lb Pound LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. LD₅₀ LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals. ltr or L Litre m³ Cubic Metre mbar Millibar mg Milligram</p>

mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH₂O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Health and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight