

# Safety Data Sheet



## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** HiSilK2, HiSilK4, HiSilP1, HiSilP3.

**Note:** All other reference materials (current and historic) prefixed with the letters "HiSil" are also covered by this safety data sheet, even if they are not listed above.

**Product Description:** Blends of dry, grey mineral powders packed in white plastic jars with tamper seals (2.5kg), and clear plastic sachets (30 - 100g).

**Product Use:** Reference Materials are used as laboratory standards in chemistry laboratories for the purpose of quality assurance.

**Company Identification:** Rocklabs Reference Materials  
63 Tidal Road  
Mangere  
Auckland 2022  
New Zealand

**Product Information:** Phone: +64 9 444 3534 (work hours)

**Emergency Telephone Number:** NATIONAL POISON CENTRE (Wellington, New Zealand)  
0800 POISON (0800 764 766)

## SECTION 2 - HAZARDS IDENTIFICATION

**HAZARD STATEMENT** Causes damage to lungs via inhalation and through prolonged or repeated exposure to airborne dust (H372). May cause cancer (H350).

**HSNO Hazard Classification:** 6.9A (inhalation)/GHS Specific Target Organ Systemic Toxicity (Repeated exposure) Category 1, 6.7A(carcinogen)/GHS Carcinogenicity Category 1A, B.

**HSNO Labelling:**



**Signal Word**

**DANGER**

### Prevention Statement

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.  
P260 Do not breathe dust  
P264 Wash hands thoroughly after handling  
P270 Do not eat, drink or smoke when using this product.

### Response Statement

P307+P311, P308 IF exposed or concerned: Call a POISON CENTRE or doctor/physician.  
P313, P314 Get medical advice/attention if you feel unwell.  
P321 Note to medical professional: Treat for inhalation of silica and nuisance dust.

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It characterises the product with regard to the appropriate safety precautions.  
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## Storage / Disposal

P405 Store locked up  
P501 Minimise and contain the dust, seal the material in a bag or container to minimise dust and dispose of the material in Landfill (refer to Section 13).

## SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER NUMBER/HSNO	HAZARD CLASSES	AMOUNT (% w/w)
Minerals Non-hazardous substances	Proprietary	Not classified as hazardous	<10%
Crystalline Silica / Quartz	14808-60-7 HSNO Approval: HSR003125	6.7 (carcinogen) 6.9A (inhalation)	> 90%

## SECTION 4 - FIRST AID MEASURES

**Comment:** This material contains abrasive minerals.

**Eye:** Remove contact lenses (if worn), and flush eyes with water. If pain persists seek medical attention.

**Skin:** Wash skin with soapy water and remove contaminated clothing.

**Ingestion:** Drink water, seek medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

**Inhalation:** Move the exposed person to fresh air. Seek medical attention

**Note to Physicians:** No specific advice - treat for symptoms.

## SECTION 5 - FIRE FIGHTING MEASURES

This product is non-flammable and will not support combustion. However the packaging and surroundings may burn.

### Suitable Extinguishing Media

Use extinguishing media appropriate for the surrounding combustibles.

### Fire Fighting Instructions

Wear Personal Protective Gear appropriate for the surroundings.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### Personal Protection

Wear respiratory protection and eye protection. Observe Workplace Exposure Limits when cleaning up (Refer to Section 8).

### Spill Management

For outdoor spills, contain the product to prevent spreading by the wind and pedestrian traffic. For large inside spills with excessive dust, evacuate the area and allow time for the dust to settle. Sweep up the material gently and avoid dust creation. Alternatively use a vacuum cleaner fitted with a HEPA filter.

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Recycle the material where possible. Alternatively dispose the material according to Section 13.

## SECTION 7 - HANDLING AND STORAGE

**General Storage Information** Keep container closed when not in use.  
**Precautionary Measures** There are no incompatible chemicals, or storage restrictions.  
**Signage on Buildings:** Buildings signage is not required for storage of this material in New Zealand.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE CONTROLS

Workplace Exposure Standards and Biological Exposure Indices (Pub. Jan 2018, Worksafe New Zealand) stipulate the following workplace exposure limits:

Dusts	*TWA	Exposure Route
Basalt & Feldspars are categorised under	10 mg/m <sup>3</sup>	Inhalable dust
Particulates not otherwise classified.	3 mg/m <sup>3</sup>	Respirable dust
Crystalline silica	0.2 mg/m <sup>3</sup>	Respirable Dust

\*TWA Time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

### APPROPRIATE ENGINEERING CONTROLS:

Ensure adequate filtered extraction to maintain air concentrations below Workplace Exposure Standards. Keep containers closed when not in use.

### PERSONAL PROTECTIVE EQUIPMENT

The selection of PPE is dependent on risk assessment taking into consideration the use and quantity of the product.

#### Respiratory Protection:

Required when airborne dust is generated. Use an appropriate respirator with Class P1 filter (3M) for solid particles generated from mechanical means, e.g. sanding, drilling, cutting, crushing, will be relatively large particles i.e. particles greater than 1 micron. Higher grades of respirators and particulate filters are also suitable.

**Eye Protection:** Wear safety goggles where dust could be generated. Do not wear contact lenses when working with this product. Maintain eye wash fountain and quick-drench facilities in work.

**Skin Protection:** Skin contact is not a known route of entry for this product. However it is recommend wearing lab coat/overalls and gloves to prevent skin contact.

#### Industrial Hygiene:

It is good practice to minimize contact with workplace chemicals. Wash exposed skin. Avoid inhaling dusts, vapours or aerosols. Change contaminated clothing and wash hands after working with chemicals.

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## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Fine grey powder (dry), with the texture of fine powder.
Specific gravity:	2.6 - 2.7 g.cm <sup>-3</sup>
Solubility in Water	Insoluble
Melting point:	~1700 °C
Boiling point:	n/a
Flash point:	n/a
Lower explosive Limit:	n/a
Upper explosive Limit:	n/a

## SECTION 10 STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	This material is stable and non-reactive under normal circumstances.
<b>Incompatibility With Other Materials:</b>	This material requires strong acids to dissolve it.
<b>Hazardous Decomposition Products:</b>	None

## SECTION 11 TOXICOLOGICAL INFORMATION

### Acute Health Effects

<b>Swallowed</b>	The solid/dust may be irritating to the gastro-intestinal tract.
<b>Eye</b>	The dust is abrasive and irritating to the eyes, and may be capable of causing corneal scarring.
<b>Skin</b>	The solid/dust is abrasive and may be irritating to the skin.
<b>Inhaled</b>	The dust is harmful and irritating to the upper respiratory tract and lungs.

### Chronic Effects

The material presents a hazard from repeated exposures over long periods. Principal route of exposure is usually by inhalation. Overexposure to respirable dust may cause coughing, wheezing, difficulty in breathing and impaired pulmonary function. Chronic symptoms include decreased vital lung capacity and chest infections. Chronic exposure may cause silicosis, a disabling form of pneumoconiosis (accumulation of dust in the lungs – confirmable by X-ray), which leads to fibrosis (scarring of the lining of the air sacs in the lungs) and increased risk of tuberculosis. Symptoms are usually delayed.

**WARNING: Note this product contains Quartz.**

Quartz (crystalline silica) has been classified by IARC as Group 1 - Carcinogenic to humans [IARC Monograph Volume 68, 1997]. Use strict occupational hygiene practices to minimize all personal contact.

## SECTION 12 ECOLOGICAL INFORMATION

### Ecotoxicity

Feldspar, basalt and crystalline silica \*(quartz) are not classified as a Ecotoxic Substances (Class 9).

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## SECTION 13 DISPOSAL CONSIDERATIONS

Recover and recycle the product where possible. The minerals components of this product are non-biodegradable and are suitable for landfill.

This product may be disposed of and buried in landfill sites in New Zealand. The material should be dampened, covered, or sealed to minimize generation of airborne dust. The packaging should be recycled where possible.

Consult your local waste management authority for guidelines on disposal in your area.

## SECTION 14 TRANSPORT INFORMATION

### DANGEROUS GOOD CLASSIFICATION

This material is classified as a Non-Dangerous Good for Transportation. according to New Zealand's Land Transport Rule, Dangerous Goods 2005, Rule 45001/1, and UN Recommendations on the Transport of Dangerous Goods. Model Regulations (Fifteenth ed.), New York and Geneva: United Nations, 2007

Proper Shipping Name	Not Applicable
UN Number	None Allocated (Non-Dangerous Good for Transport)
Dangerous Goods Class	None Allocated (Non-Dangerous Good for Transport)
Subsidiary Risk	No Subsidiary risk for Transportation
Packaging Group	None Allocated
Hazchem Code	None Allocated

## SECTION 15 REGULATORY INFORMATION

- Environmental Protection Authority, New Zealand: <http://www.epa.govt.nz>  
**HSNO Approval Number (HSR): Laboratory Chemicals and Reagent Kits Group Standard 2017 HSR002596**
- Hazardous Substances (Safety Data Sheets) Notice 2017
- Health and Safety at Work (Hazardous Substances) Regulations 2017
- Hazardous Substances (Classification) Notice 2017
- Thresholds and Classifications Under the Hazardous Substances and New Organisms Act 1996 January 2012 (Content as originally published March 2008)
- Labelling of Hazardous Substances. Hazard and Precautionary Information - as originally published by ERMA July 2006
- Hazardous Substances (Minimum Degrees of Hazard) Notice 2017
- Hazardous Substances (Disposal) Notice 2017
- A Guide to the Management of Cleanfills (Landfills).
- Land Transport Rule, Dangerous Goods 2005, Rule 45001/1. Amendment 2016.
- UN Recommendations on the Transport of Dangerous Goods. Model Regulations (Fifteenth ed.), New York and Geneva: United Nations, 2007

## SECTION 16 OTHER INFORMATION

This product is intended for use in Chemistry Laboratories. It is the responsibility of the user to ensure compliance with local regulations when using and disposing of this product. Please refer to the certificate of analysis for additional information on the composition of the product.

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