

## SAFETY DATA SHEET

According to  
 HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

### Section 1. Identification of the material and the supplier

Product: **HiSiIK2, HiSiIK4, HiSiIP1, HiSiIP3**  
 All other reference materials (current and historic) prefixed with the letters "HiSiI" 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.

Restriction of Use: Refer to Section 15

New Zealand Supplier: **Rocklabs Reference Materials**  
 Address: 63 Tidal Road  
 Mangere  
 Auckland, 2022

Telephone: +64 9 444 3534  
**Emergency No: 0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 17 May 2023 v2

### Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

**EPA Approval No: Laboratory Chemicals and reagent kits – HSR002596**

#### Pictograms



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Carcinogenicity Cat. 1	H350	May cause cancer.
Specific target organ toxicity – repeated exposure Cat. 1	H372	Causes damage to organs(inhalation) through prolonged or repeated exposure to airborne dust.

Prevention Code	Prevention Statement
P103	Read carefully and follow all instructions.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust.

P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P281	Use personal protective equipment as required.

<b>Response Code</b>	<b>Response Statement</b>
P314	Get medical advice/attention if you feel unwell.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

<b>Storage Code</b>	<b>Storage Statement</b>
P405	Store locked up.

<b>Disposal Code</b>	<b>Disposal Statement</b>
P501	Dispose of according to Local Regulations or Authorities

### Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Crystalline Silica / Quartz	>90	14808-60-7
Minerals	<10	Proprietary
Non-hazardous substances		

### Section 4. First Aid Measures

Routes of Exposure:

If in Eyes Rinse cautiously with water for 15 minutes. If eye irritation persists: Get medical advice.

If on Skin Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.

If Swallowed Do not induce vomiting. Wash out mouth thoroughly with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.

If Inhaled Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

#### Most important symptoms and effects, both acute and delayed

Symptoms: May cause cancer. Causes damage to organs (inhalation) through prolonged or repeated exposure to airborne dust.

### Section 5. Fire Fighting Measures

<b>Hazard Type</b>	This product is non-flammable and will not support combustion. However the packaging and surroundings may burn.
<b>Hazards from combustion products</b>	No data available.
<b>Suitable Extinguishing media</b>	Use extinguishing media appropriate for the surrounding combustibles.
<b>Precautions for firefighters and</b>	Wear Personal Protective Gear appropriate for the surroundings.

<b>special protective clothing</b>	
<b>HAZCHEM CODE</b>	<b>None Allocated</b>

## Section 6. Accidental Release Measures

Wear protective gear as detailed in Section 8. For large inside spills with excessive dust, evacuate the area and allow time for the dust to settle.

For outdoor spills, contain the product to prevent spreading by the wind and pedestrian traffic.

Sweep up the material gently and avoid dust creation. Alternatively use a vacuum cleaner fitted with a HEPA filter. Dispose of in compliance with local and/or national regulations as detailed in Section 13.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read carefully and follow all instructions.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use personal protective equipment as required.

### Precautions for Storage:

- There are no incompatible chemicals, or storage restrictions.
- Store locked up.
- Keep container closed when not in use.

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Crystalline Silica (Respirable dust)	-	0.05	-	-
Basalt & Feldspars are categorised under	-	3 (Respirable dust)		
Particulates not otherwise classified.	-	10 (Inhalable dust)		

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13<sup>TH</sup> EDITION.

### Engineering Controls

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

### Personal Protection Equipment

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



<b>Eyes</b>	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.
<b>Skin</b>	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.
<b>Respiratory</b>	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.
<b>General</b>	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.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Fine powder(dry), with a texture of fine powder
<b>Colour</b>	Grey
<b>Odour</b>	Not available
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not available
<b>Boiling Point</b>	Not available
<b>Melting Point</b>	~1700 <sup>o</sup> C
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Not available
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Specific Gravity</b>	2.6 – 2.7 g/cm <sup>3</sup>
<b>Water Solubility</b>	Insoluble
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not available

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Non-reactive under normal circumstances.
<b>Conditions to Avoid</b>	No data available.
<b>Incompatible Materials</b>	This material requires strong acids to dissolve it.
<b>Hazardous Decomposition Products</b>	None known.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	This material has been classified as non-hazardous however if swallowed the dust may be irritating to the gastro-intestinal tract.
<b>Dermal</b>	This material has been classified as non-hazardous.

<b>Inhalation</b>	This material has been classified as non-hazardous however if inhaled the dust may be harmful and irritating to the upper respiratory tract and lungs.
<b>Eye</b>	This material has been classified as not corrosive or irritating to eyes however if dust gets into the eyes it may be abrasive, irritating and capable of causing corneal scarring.
<b>Skin</b>	This material has been classified as not corrosive or irritating to skin.
<b>Sensitisation</b>	This material has been classified as non-hazardous.

#### Chronic Effects:

<b>Carcinogenicity</b>	May cause cancer.
<b>Reproductive Toxicity</b>	This material has been classified as non-hazardous.
<b>Germ Cell Mutagenicity</b>	This material has been classified as non-hazardous.
<b>Aspiration</b>	This material has been classified as non-hazardous.
<b>STOT/SE</b>	This material has been classified as non-hazardous.
<b>STOT/RE</b>	Causes damage to organs through repeated or prolonged exposure. 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.

### Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

<b>Product:</b>	
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available

### Section 13. Disposal Considerations

#### Disposal Method:

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.

**Precautions or methods to avoid:** None known.

### Section 14 Transport Information

**This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021**

### Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

<b>HSW (HS) Regulations 2017 and EPA Notices</b>	<b>Trigger Quantity</b>
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	Not required
Emergency Response Plan	1000kg
Secondary Containment	1000kg
Restriction of Use	Only use for the intended purpose.

<b>Section 16</b>	<b>Other Information</b>
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**Glossary**

Cat	Category
EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

**References:**

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

**Disclaimer**

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Please contact the New Zealand distributor, if further information is required.

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