



# SAFETY DATA SHEET

Silica Sand

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## Section 1: Identification of the Material & Supplier

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### Company Details

PF Formation  
ABN 30 003 178 318

1774 Wisemans Ferry Road  
Maroota NSW 2756  
Australia

### Telephone

+61 2 4566 8314

### Emergency Contact

**0418 439 923**

### Email

admin@pfformation.com.au

### Product Name

Silica Sand

### Other Names

Sand, Filling Sand, Maroota 5mm Gold, 10mm Pea Gravel, Brickie Sand, Coarse Sand, Red Sand, White clay, 30mm sandstone, Compaction Sand, Super Fine Sand, Bunker Sand, Landscape Sand, Blended Sand, Quartz sands

### Use

Sand is used in building construction, brick making, road building, cement, horse arenas

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## Section 2: Hazard Identification

This product is classified as hazardous according to the GHS found  
Not classified as a dangerous good by the criteria of the ADG code, IMDG or IATA.

### GHS Classifications

Skin Corrosion/Irritation: Category 2

Serious Eye Damage / Eye Irritation: Category 1

Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2

### SIGNAL WORD WARNING

#### Pictograms



### Hazard statements

H319 Causes eye irritation.

H335 May cause respiratory irritation.

H373 May cause damage to lungs and respiratory tract through prolonged or repeated exposure.

H350 May cause Cancer – Cat 1A

H317 May cause an allergic skin reaction

### Prevention statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

### Response statements

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

P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

### Disposal statements

P501 Dispose of contents/container in accordance with relevant regulations.

<b>UN</b>	No None Allocated	<b>Hazchem Code</b>	None Allocated	<b>Pkg Group</b>	None Allocated
<b>DG Class</b>	None Allocated	<b>Subsidiary Risk(s)</b>	None Allocated	<b>EPG</b>	None Allocated

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## Section 3: Composition & Information on Ingredients

Being a sand based product there is a risk that the 'Respirable Crystalline Quartz' (RCQ) content may be hazardous to human health. While the product is wet and being applied the amount of airborne RCQ will be reduced but it is strongly advised that proper PPE is worn to minimize the possibility of inhalation. Once dry any residues, grinding or strong abrasive forces on the finished product may reintroduce RCQ into the air so caution should be taken.

Ingredient	Formula	Conc.	CAS No.
Quartz (respirable fraction)	SiO <sub>2</sub>	89.0-99.9% (%by weight)	14808-60-7

Note: Quartz is a natural constituent of most rocks, the amount depends on the rock type.

## Section 4: First Aid Measures

### Swallowed

Ingestion is unlikely under normal conditions of use, however swallowing of quarry products may result in abdominal discomfort and possibly increase the risk of gastro-intestinal infections, give a large amount of water.

### Eye

Dust from this product may irritate eyes causing watering and redness. Flush thoroughly with flowing water for at least 15 minutes. Seek medical attention if symptoms persist.

### Skin

Dust from this product may be irritating and abrasive to the skin. Wash off thoroughly with water and mild soap. A shower may be required

### Inhaled

Dust may irritate nose, throat and respiratory tract and can exacerbate pre-existing conditions such as asthma and bronchitis. Exit from dusty area to fresh air and if symptoms persist, seek medical attention.

### Chronic Health Effects

Repeated inhalation of these products may lead to respiratory irritation, inflammation or sensitisation. Because Quarry Products may contain crystalline silica, repeated inhalation of high concentrations of respirable dust may cause scarring of the lung (silicosis), lung cancer, and chronic bronchitis. Epidemiological studies have shown that smoking increases the risk of bronchitis, silicosis and lung cancer in person exposed to crystalline silica.

It may also increase the risk of scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs). It is not recommended to repeatedly swallow this material or repeatedly allow it to come into contact with eyes.

### ADVICE TO DOCTOR

Treat symptomatically.

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## Section 5: Fire Fighting

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Quarry products are not flammable, do not support combustion of other materials, and do not cause dust explosions. Use suitable extinguishing agent for surrounding fire.

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## Section 6: Accidental Release Measures

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### Spillage

Spilled material should be wet down with water to reduce dust generation before cleanup. Clear area of all unprotected personnel. Prevent spills entering drains or waterways.

### Emergency Procedure

Wear dust-proof goggles, PVC/rubber gloves, and a Class P2 respirator (where an inhalation risk exists). Refer to Section 8 Exposure.

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## Section 7: Handling & Storage

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### Handling

Any involvement with these products should be conducted in a way as to avoid contact with the skin and eyes as well as swallowing and inhalation. Keep exposure to dust as low as practicable, with the aim of maintaining respirable crystalline silica dust levels to below 0.05 mg/m<sup>3</sup> TWA. Work in open air and the opening or external openings (such as doors and windows in buildings) generally provides adequate ventilation.

### Storage

Avoid breathing dust. Respirable dusts may be generated during processing, handling, and storage. Use proper control measures, including ventilation, enclosure of materials, covering loads on trucks and wetting down material whilst in use. When stockpiling and handling large quantities of quarry products, care should be taken to avoid having the faces of the stockpile steeper than the natural angle of repose of the material. Steep faces can fall without warning and trap persons resulting in injury and possible suffocation.

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## Section 8: Exposure Controls & Personal Protection

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### Exposure Standards

Silica-crystalline-Quartz (14808-60-7) ES-TWA (Time Wasted Average): 0.1 mg/cubic metre time-weighted average (Respirable).

Inspirable dust NOS (not otherwise specified): 10mg/cubic metre time-weighted average (TWA) for dust containing 1.0% or less of crystalline-silica. (Inspirable dust is equal to or less than 180 micron size).

### Personal Protection

#### Skin Protection

Wear loose comfortable clothing and boots and standard duty leather or equivalent gloves. Long sleeved shirts and long trousers are recommended if a skin irritation occurs or a person has a history of skin conditions. All work clothes should be washed regularly. Clothing according to AS 2161.

#### Respiratory Protection

When exposed to dust an approved respirator should be worn that is suitable for respirable particulate and which conforms with AS/NZS 1715 and AS/NZS 1716. The standards should be followed in the selection, fit testing, use, storage and maintenance of the respiratory equipment.

#### Eye Protection

Dust resistant non-fogging safety goggles or glasses (AS/NZS 1336) should be worn if exposed to dust.



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## Section 9: Physical and Chemical Properties

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<b>Appearance</b>	Fine to coarse grains varying in colour from white, yellow to red
<b>Odour</b>	None
<b>Ph</b>	Approximately 7
<b>Vapour Pressure</b>	Not Available
<b>Vapour Density</b>	Not Available
<b>Boiling Point / Range</b>	Not Available
<b>Freezing / Melting Point</b>	Not Available
<b>Solubility</b>	Insoluble
<b>Specific Gravity</b>	2.7 Average
<b>Flash Point</b>	Not Relevant
<b>Upper and lower flammability Limits</b>	Not Relevant
<b>Ignition Temp</b>	Not Relevant
<b>Particle Size</b>	A proportion of the dust may be respirable (below 10 microns) and if it becomes airborne constitutes an exposure if inhaled

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## Section 10: Stability and Reactivity

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<b>Chemical Stability</b>	Chemically Stable
<b>Condition to Avoid</b>	Dust generation
<b>Incompatible materials</b>	Incompatible with oxidizing agents (eg hypochlorites), ethanol, acids (eg hydrofluoric acid) and interhalogens (eg chlorine trifluoride). Water contact may increase product size.
<b>Decomposition Products</b>	None
<b>Hazardous Reactions</b>	None

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## Section 11: Toxicological Information

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<b>Acute Toxicity</b>	High chronic toxicity. Associated with prolonged exposure to high dust levels
<b>Eye</b>	Irritant upon contact with dust. Over exposure may result irritation and lacrimation.
<b>Inhalation</b>	Long term exposure can lead to irritation in the nose and throat. Prolonged and repeated inhalation of respirable silica may result in silicosis.
<b>Skin</b>	Irritating to the skin. Prolonged and repeated contact may result in skin rash, abrasions and dermatitis.
<b>Ingestion</b>	This product is biologically inert. However, ingestion may result in gastrointestinal irritation due to the dusts mechanical action.
<b>Mutagenicity</b>	Insufficient data available for this product to classify as a mutagen
<b>Carcinogenicity</b>	Dried sand is not classified as a carcinogen by NOHSC. Crystalline silica is classified as carcinogenic to humans (IARC Group 1), however due to low levels present and product application, the criteria for classification is not met.

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## Section 12: Ecological Information

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<b>Toxicity</b>	Product is inert when mixed with water. This product is no toxic to aquatic life forms
<b>Persistence &amp; degradability</b>	Product is persistent and would have a low degradability
<b>Mobility</b>	A low mobility would be expected in a landfill situation

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## Section 13: Disposal Considerations

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Clean Quarry materials can be reused, otherwise dispose of waste quarry materials in accordance with local authority guidelines. Measures should be taken to prevent dust generation during disposal and exposer and personal precautions should be observed.

Refer to section 8

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## Section 14: Transport Information

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### Transportation

When transporting by road, all loads should be covered.

UN Number	None Allocated
UN proper Shipping name	None Allocated
Class & subsidiary risk	None Allocated
Packing Group	None Allocated
Hazchem Code	None Allocated
Spread precautions for user	See Section 13
DG Class	None Allocated

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## Section 15: Regulatory Information

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- Crystalline silica is classified as non-Dangerous Goods according to the Australian code for the Transport of Dangerous Goods by Road & Rail
- Crystalline silica in the form of respirable dust is classified as Hazardous according to the Australian Safety and Compensation Commission
- More detailed information can be found at [https://www.nicnas.gov.au/chemical-information/imap-assessments/imap-group-assessment-report?assessment\\_id=1120#cas-A\\_14808-60-7](https://www.nicnas.gov.au/chemical-information/imap-assessments/imap-group-assessment-report?assessment_id=1120#cas-A_14808-60-7)
- [http://www.unece.org/trans/danger/publi/ghs/ghs\\_rev03/03files\\_e.html](http://www.unece.org/trans/danger/publi/ghs/ghs_rev03/03files_e.html)
- <http://hcis.safeworkaustralia.gov.au/HazardousChemical>

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## Section 16: Other Information

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### Special Considerations for Repairs & Maintenance on vehicles transporting or handling Silica Sand

Avoid breathing dust. Where possible vacuum or wash down all gear, equipment or mobile plant prior to maintenance and repair work. If compressed air cleaning cannot be avoided, wear eye and respiratory protection, and clothing as listed in Section 8.

### Smoking and other dusts

Smoking increases the risk of occupational respiratory diseases. It is recommended that all storage and work areas should be smoke-free zones.

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