

DIXON SAND (PENRITH) PTY LTD

Material Safety Data Sheet

Silica Sand

STATEMENT OF HAZARDOUS NATURE: This Product is classified as hazardous according to the criteria of the National Occupational Health and Safety Commission (NOHSC).

Dixon Sand (Penrith) Pty Ltd
PO Box 148
Penrith NSW 2751

Telephone: (02) 4566 8348
Facsimile: (02) 4566 8245

IMPORTANT NOTICE: This materials Safety Data Sheet (MSDS) is issued by Dixon Sand (Pty Ltd) Penrith, in accordance with national occupational Health and Safety commission (NOHSC) Guidelines. The information within must not be altered. Dixon Sand s will issue an amended MSDS if there is a change in specifications or guidelines. Dixon Sands will not accept any responsibility for any unauthorised modifications to its MSDS.

Product Name:	Silica Sand
Applicable in:	Australia
Other Names:	Not Applicable
Manufacturers Product Code:	Not Applicable
UN Number:	None Allocated
Dangerous Goods Class & Subsidiary Risk:	None Scheduled
Hazchem Code:	None Allocated
Poisons Schedule Number:	None Allocated
Use:	Used as filling sand, turf underlay, and as a fine aggregate in mortar and concrete.

UNSPECIFIED

Physical Description/Properties:

Appearance:	Granular Sand ranging in colour from tan to orange brown.
Boiling Point (C°):	Not Applicable
Melting Point (C°):	Not Applicable
Vapour Pressure:	Not Applicable
Specific Gravity (H₂O=1)	2.0 – 3.0
Flashpoint:	Not Applicable
Flammability limits:	Not Applicable

Solubility in water: Insoluble
Auto-ignition Temperature (C°): Does not Auto Ignite
Odour Threshold: Normally no odour
PH, at Standard Concentration: Between 4.5 – 7.0
Molecular Weight: Not determined

INGREDIENTS:

Chemical Name:	CAS Number:	Proportion:	Exposure Limits:
Sand – Crystalline Silica (Quartz)	14808-60-7	>95%	0.2 mg/m ³ resp quartz
Mineral and Organic Impurities		<5%	

HEALTH HAZARD INFORMATION:

Silica Sand is a granular sand used as a filing sand, mortar sand, concrete sand, and turf underlay. The health hazards are mainly related to dust generated containing crystalline silica during handling. **Repeated inhalation of crystalline silica may cause serious illness (see below – Health effects, chronic). Repeated inhalation of crystalline silica may add to or multiply the serous health effects caused by tobacco smoke.** Inhaling dust containing crystalline silica may cause scarring of the lung (silicosis), lung cancer, chronic bronchitis, and may increase the risk of schleroderma (thickening of the connective tissue) and kidney disease (increased prevalence of renal abnormalities and end-stag: Renal disease from Glomerulonephritis). It is therefore essential to avoid inhalation of dust.

HEALTH EFFECTS:

Acute:

Swallowed: Unlikely under normal conditions of use but swallowing of this product will result in abdominal discomfort.
Eye: Dust from this product may irritate the eyes, causing watering and redness.
Skin: Silica sand and dust may be irritating and abrasive to skin.
Inhaled: The dust may irritate the nose, throat and respiratory tract.

Chronic:

Inhaled: Repeated inhalation of Silica sand dust containing crystalline silica may cause scarring of the lung (silicosis), lung cancer, and chronic bronchitis, and may increase the risk of schleroderma (thickening of the protected tissue) and kidney disease. Studies have shown that smoking increases the risk of bronchitis, silicosis, and lung cancer in persons exposed to crystalline silica.

FIRST AID:

Swallowed: Give water to drink.
Eye: Flush eyes thoroughly with running water.
Skin: Wash skin with soap and water.
Inhaled: Remove to fresh air.
Advice to doctor: Treat symptomatically.

PRECAUTIONS FOR USE:

- Exposure standards:** Australian Occupational Exposure Standards (OES); (NOHSC 1003 National Exposure Standards): Exposures must be minimised to as low as reasonably practicable. Crystalline Silica: All exposures must be minimised to as low as is reasonably practicable and in all situations to below $0.2\text{mg}/\text{m}^3$. It is recommended that levels of respirable crystalline silica be kept below $0.05\text{mg}/\text{m}^3$.
- Engineering Controls:** Keep exposures to dust as low as practicable, with the aim of maintaining respirable crystalline silica dust levels to below $0.05\text{mg}/\text{m}^3$ TWA (time-weighted-average). Work in the open air and the opening of external openings (such as doors and windows in buildings) generally provides adequate ventilation. Local mechanical ventilation or extraction may be required in areas where dust could escape into the working environment.
- Ventilation:** None required if engineering and handling controls are adequate. If dust is generated, wear respiratory protection for particulates conforming to Australian Standards AS/NZS 1715 & 1716, Category P1 or P2.
- Special Considerations for Repair/Maintenance:** Avoid breathing dust. Where possible vacuum or wash down 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 below.
- Personal protection / Skin Protection:** Wear loose comfortable clothing and gloves (Standard Duty Leather or equivalent AS2151: Industrial Safety Gloves and Mittens). Wash work clothes regularly.
- Eye Protection:** Dust resistant non-fogging safety goggles or glasses (AS/NZS 1336: Recommended practices for eye protection in the industrial environment) should be worn if exposed to dust.
- Respiratory protection:** None required if engineering and handling controls are adequate. If dust is generated, wear a P1 or P2 particulate respirator (dust mask) conforming to Australian Standards AS/NZS 1715: Selection, use and maintenance of respiratory protective devices and AS/NZS 1716: Respiratory protective devices when exposed to dust.

- Personal Hygiene:** Flush dust off skin with water or wash skin with mild soap and water after working with sand.
- Flammability:** Silica sand is not flammable, does not support combustion of other materials, and does not cause dust explosions.

SAFE HANDLING INFORMATION:

Storage and transport: Avoid breathing dust. Respirable dusts can 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 silica sand, 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 possibly suffocation. When transporting by road all loads should be covered.

Spills and Disposals: Spilled material should be wet down with water to reduce dust generation before clean up. If unable to reuse or recycle, dispose of waste materials in an authorised land fill site, in accordance with local authority guidelines.

Fire / Explosion Hazard: Silica sand is non-flammable.

CONTACT POINT

For further information on this product please contact the following:

DIXON SAND (Pty Ltd) PENRITH. P.O BOX 148, PENRITH, NSW, 2751.
PH: 02 4729 0640 FX: 02 4729 1857

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