



SAFETY DATA SHEET 2018

Product: SILICA SAND

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Details: Macka's Sand & Soil Supplies

Address 2684 Nelson Bay Road Salt Ash NSW 2318

Tel/Fax Tel: 02 4982 6227 Fax: 02 4982 6506

Other

Names/Synonyms

Clean sand, Quartz sands, Wash concrete sand, Packing sand, Concrete sand, Foundry sand, Fine sand, Medium sand, Manufacturing sand, Fine white sand, Wash pit sand, Bricklayer's sand.

Use Quartz sands are used in building construction and other civil engineering activities

Eg: road building

Other Information N/A

SECTION 2: HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE NON-DANGEROUS GOODS

This product contains crystalline silica. Crystalline silica dust is classified as Hazardous (Australian Safety and Compensation Commission ASCC (formerly NOHSC) Approved Criteria for Classifying Hazardous Substances [NOHSC:1008] 3rd Edition)

- The solid product as supplied is classified as non-Hazardous
- Dust in/on the supplied product or created when the product is cut, abraded, or crushed contains crystalline silica some of which may have particles small enough to go into the deep parts of the lung when breathed in. (respirable)
- A proportion of the fine dust in/on the supplied product may be respirable crystalline silica

The following Risk and Safety phrases apply to this product:

Risk Phrases: Safety Phrases:

R20: Harmful by Inhalation (Applies to dust)

R22: Harmful if Swallowed

R48: Danger of serious damage to health by prolonged exposure through inhalation (Applies to dust)

S22: Do not breathe dust

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

All significant constituents are listed below:

Major Ingredients

Name CAS Proportion

Sand

Containing Crystalline Silica (Quartz)

Mineral and organic impurities

14808-60-7

NA

>50 -100 %

Balance

SECTION 4: FIRST AID MEASURES

Swallowed:	Rinse mouth and lips with water. Do not induce vomiting. If symptoms persist, seek Medical attention.
Eye:	Flush thoroughly with flowing water, while holding eyelids open, for 15 minutes to remove all traces. If symptoms such as irritation or redness persist, seek medical attention.
Skin:	Remove heavily contaminated clothing. Wash off skin thoroughly with water. Use a mild soap if available. Shower if necessary. Seek medical attention for persistent redness, irritation or burning of the skin.
Inhaled:	Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have a qualified person give oxygen through a face mask if breathing is difficult. If irritation persists seek medical attention
First Aid Facilities:	Eye wash and normal washroom facilities

Advice to Doctor: Treat symptomatically or consult a Poisons Information Centre

SECTION 5: FIRE FIGHTING MEASURES

Flammability:	Not flammable or combustible
Hazards from combustion products:	None
Suitable extinguishing media:	Not applicable
Special protective precautions and equipment for fire fighters:	None
Hazchem code:	None allocated

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spills:

- Dust is best cleaned up by vacuum device to avoid making dust airborne. Wetting down before sweeping up dust may be a useful control measure
- Recommendations on Exposure Controls / Personal Protection (see Section 8 below) should be followed during spill clean-up if conditions are dusty

SECTION 7: HANDLING AND STORAGE

Storage Precautions:	No special storage requirements
Transport:	Not classified as a Dangerous Goods, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (6th Edition)
Proper Shipping Name:	None Allocated

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

The following applies to dust from this product:

Exposure Limits:

National Occupational Exposure Standard (NES) Australian Safety and Compensation Commission ASCC.

Exposure to dust should be kept as low as practicable, and below the following NES:-
Crystalline silica (quartz): 0.1 mg/m³ TWA (time-weighted average) as respirable dust. Total dust (of any type, or particle size): 10 mg/m³ TWA

Engineering Controls:

All work should be carried out in such a way as to minimise dust generation, and exposure to dust. Mechanical ventilation: Dust extraction and collection may be used, if necessary, to control airborne dust levels.

Work areas should be cleaned regularly.

Personal Protection:

- Skin:** Ensure a high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking, smoking or using the toilet. Remove all contaminated clothing. Wash gently and thoroughly with tepid water and non-abrasive soap. If irritation develops and persists seek medical attention
- Eyes:** Safety glasses with side shields or safety goggles (AS/NZ 1336) or a face shield should be worn.
- Respiratory:** Where engineering and handling controls are not enough to minimise exposure to total dust and to respirable crystalline silica, personal respiratory protection may be required. The type of respiratory protection required depends primarily on the concentration of the respirable crystalline silica dust in the air, and the frequency and length of exposure time. Amount of exertion required during the work, and personal comfort are other considerations in choice of respirator. A suitable P1 or P2 particulate respirator chosen and used in accordance with AS/NZS 1715 and AS/NZS 1716 may be sufficient for many situations, but where high levels of dust are encountered, more efficient cartridge type or powered respirators or supplied-air helmets or suits may be necessary. Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly. For dust levels approaching or exceeding the NES (see above) a more effective particulate respirator providing a greater protection factor should be worn. Procedures for effective use of respirators should be applied and supervised. Do not contaminate the home environment with dusty work clothes and shoes. Do not shake out work clothes before laundering

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Fine to coarse grains varying in colour from white to yellow.

Odour: None

Ph = 6.5 – 8.9

Vapour Pressure: Not determined

Vapour Density: Not determined

Boiling Point/range: Not determined

Freezing/melting point: Not determined

Solubility: Not soluble.

Specific Gravity = 2.5-2.7 t/m³

Flash Point: n/a

Upper and lower flammability limits: n/a

Ignition Temp: n/a

Particle Size: A proportion of the dust may be respirable (below 10 microns) and if it becomes airborne constitutes an exposure if inhaled.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Chemically Stable

Condition to avoid: Dust generation

Incompatible materials: None

Hazardous Decomposition:

Products: None

Hazardous Reactions: None

Crystalline silica is stable, compatible with other materials, does not polymerise, and will not decompose into hazardous by-products.

SECTION 11: TOXICOLOGICAL INFORMATION

Health Effects:-

Acute (short term) -

- Swallowed:** Unlikely under normal industrial use. Mildly abrasive to mouth and throat if swallowed
- Eye:** Dust is irritating to the eyes. Exposure to dust may aggravate pre-existing eye conditions.
- Skin:** Dust may be mildly irritating and drying to the skin due to its physical characteristics
- Inhaled:** Dust is mildly irritating to the nose, throat and respiratory tract and may cause coughing and sneezing. Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.

Chronic (long term)-

- Eyes:** Dust may cause irritation and inflammation of the eyes and aggravate pre-existing eye conditions.
- Skin:** Repeated heavy contact with the dust may cause drying of the skin and can result in skin rash (dermatitis) typically affecting the hands. Over time this may become chronic and can also become infected.
- Inhaled:** Repeated exposure to the dust may result in increased nasal and respiratory secretions and coughing. Inflammation of lining tissue of the respiratory system may follow repeated exposure to high levels of dust with increased risk of bronchitis and pneumonia.
- Long term occupational over-exposure or prolonged breathing-in (or inhalation) of crystalline silica dust at levels above the NES carries the risk of causing serious and irreversible lung disease, including bronchitis, and silicosis (scarring of the lung), including acute and/or accelerated silicosis. It may also increase the risk of other irreversible and serious disorders including scleroderma (a disease affecting the skin, joints, blood vessels and internal organs) and other auto-immune disorders. Inhalation of dust, including crystalline silica dust, is considered by medical authorities to increase the risk of lung disease due to tobacco smoking.
- The product contains a proportion of respirable free crystalline silica in the quartz component. Crystalline silica (inhaled in the form of quartz or cristobalite from occupational sources) has been classified by The International Agency for Research on Cancer (IARC) as carcinogenic to humans (Group 1). However (in the view of CC&AA) the research on this is inconclusive and ASCC/NOHSC has not classified crystalline silica as a carcinogen.
- The most current research indicates no excess risk of lung cancer or other cancers from using these products

Other

Information:

Inhalation of airborne particles from other sources in the work environment, including those from cigarette smoke, may increase the risk of respiratory diseases. It is recommended that all storage and work areas should be smoke-free zones and that other airborne contaminants should be kept to a minimum.

SECTION 12: ECOLOGICAL INFORMATION

Silica Sands

Ecotoxicity: Silica sands pose no ecology risk. They are non-toxic to aquatic and terrestrial organisms and are not biodegradable.

Persistence and Degradability: Product is persistent and is non-degradable

Mobility: Low mobility would be expected in a landfill situation

Dust: Crystalline silica is non-toxic to aquatic and terrestrial organisms; is not biodegradable; is insoluble and is expected to have low mobility in landfill

SECTION 13: DISPOSAL CONSIDERATIONS

- Crystalline silica itself in all common forms can be treated as a common waste for disposal or dumped into a landfill site in accordance with local authority guidelines
- Measures should be taken to prevent dust generation during disposal and exposure and personal precautions should be observed (see above)
- Wear sufficient respiratory protection. Dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container for reuse
- May be disposed in local landfill

SECTION 14: TRANSPORT INFORMATION

UN Number: None Allocated

UN proper Shipping name None Allocated

Class and subsidiary risk None Allocated

Packing Group None Allocated

Hazchem Code None Allocated

Special precautions for user See Above

DG class None Allocated

SECTION 15: REGULATORY INFORMATION

- Crystalline silica is classified as non-Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail
- Crystalline silica in the form of respirable dust is classified as Hazardous according to the Australian Safety and Compensation Commission ASCC (formerly NOHSC) Approved Criteria For Classifying Hazardous Substances [NOHSC:1008] 3rd Edition
- Exposures by inhalation to high levels of dust may be regulated under the Hazardous Substances Regulations (State and Territory) as they are applicable to Respirable Crystalline Silica, requiring exposure assessment, and control of inhalation exposure below the NES
- Persons who have potential for exposure above the NES may be required by Regulations to have periodic health surveillance including Chest X-ray (see relevant State Government Regulations and ASCC/NOHSC documentation).

Notice: We believe the information contained in this Material Safety Data Sheet is accurate and is given in good faith, but no warranty expressed or implied is made.

The suggested procedures are based on experience as of the date of publication. They are not necessarily all-inclusive nor fully adequate in every circumstance. Users are advised to make their own independent determination of suitability and completeness of information at their own risk, in relation to the particular purposes and specific circumstances.

Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us for any loss or damage cause by any person acting or refraining from action as a result of any information contained in this Material Safety Data Sheet.

Where the information provided herein disclosed a potential hazard or hazardous ingredient, adequate warning should be provided to employees and users and appropriate precautions taken.