

WA SALT GROUP



MATERIAL SAFETY & DATA SHEET Group 5

1. IDENTIFICATION OF THE MATERIAL & COMPANY

Product: Silica Sand

Synonyms: N/A

Use: Pool Filtration Systems

Supplier: WA Salt Group, 187 Cockburn Road, North Coogee WA 6163

Telephone: (08) 9431 9431

EMERGENCY TELEPHONE NUMBER (08) 9431 9431

This Material Safety Data Sheet (MSDS) is issued by the Supplier in accordance with the Code and guidelines from the Australian Safety and Compensation Council (ASCC, formerly National Occupational Health & Safety Commission – NOHSC). The information in it must not be altered, deleted or added to. The Supplier will not accept any responsibility for any changes made to its MSDS by any other person or organisation. The Supplier will issue a new MSDS when there is a change in the product specifications and / or ASCC standards, guidelines or regulations.

2. HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE: classified as Hazardous according to the criteria of the 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 created when the product is cut, abraded or crushed contains crystalline silica some which will be respirable (particles small enough to go into deep parts of the lung when breathed in). The fine dust in/on the supplied product may be respirable crystalline silica.

Occupational Health and Safety Regulations in Western Australia prohibit the use of crystalline silica as an abrasive blasting medium.

Risk Phrases:

R48/20 Danger of serious damage to health by prolonged exposure through inhalation

Safety Phrases:

S22: Do not breathe dust

3. COMPOSITION OF THE MATERIAL

<u>Chemical Name</u>	<u>Concentration</u>	<u>CAS #</u>
Crystalline Silica (Quartz)	> 98%	14808-60-70
Mineral & organic impurities	< 2%	

4. FIRST AID MEASURES

Inhalation: Remove to fresh air, away from dusty areas. Seek medical attention for any breathing difficulty.

Ingestion: Rinse mouth and lips with water. Do not induce vomiting. If symptoms persist seek medical attention.

Skin Contact: Remove heavily contaminated clothing. Wash off skin thoroughly with water. Use mild soap if available. Shower if necessary. Seek medical attention if irritation, redness or burning of skin develops or persists.

Eye Contact: Flush thoroughly with flowing water, while holding eyelids open, for 15 minutes to remove all traces. Do not attempt to remove solid particles embedded in the eye. Seek medical advice if irritation or redness develops or persists.

Advice to Doctor: Treat symptomatically.

5. FIRE FIGHTING MEASURES

HAZCHEM CODE: NONE ALLOCATED

This material is non combustible. Flames on or in the vicinity of this material can be extinguished using conventional fire fighting agents and procedures.

6. ACCIDENTAL RELEASE MEASURES

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.

7. HANDLING & STORAGE

Avoid breathing dust. Respirable dusts can be generated during processing, handling and storage. 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 possible suffocation.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

The following applies to dust from this product:

- Exposure Standards:** National Occupational Exposure Standard (NES) Australian Safety and Compensation Commission ASCC (formerly NOHSC) 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. (<7 microns particle equivalent aerodynamic diameter). Total dust (of any type, or particle size): 10 mg/m³ TWA
- Engineering Controls:** Keep exposures to dust as low as practicable, with the aim of maintaining respirable crystalline silica dust levels to below 0.05 mg/m³ TWA (time weighted average).
- Ventilation:** 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. Local dust extraction and collection may be used, if necessary, to control airborne dust levels. If generated dust cannot be avoided follow personal protection recommendations. 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 below.

Personal Protection

- Skin Protection:** Wear loose comfortable clothing and gloves (standard duty leather or equivalent AS2161). Wash work clothes regularly. Wash hands before eating, or smoking.
- Eye Protection:** Safety glasses with side shields or safety goggles (AS/NZ 1336) or a face shield should be worn.
- Respiratory Protection:** None required if engineering and handling controls are adequate to minimize dust generation and dust exposure. Where engineering and handling controls are not enough to minimize 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.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance: White, granular with mixture of coarse and fine solid particles

Ph: Approximately neutral depending on nature of raw materials

Specific Gravity
(H²O=1): 2.0 - 3.2

Solubility in Water: Insoluble

10. STABILITY & REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: None

Incompatible materials: None

Hazardous Reactions: None

11. TOXICOLOGICAL INFORMATION

Typically said no specific toxicology data available as it is of very low acute toxicity to plants, animals and humans. Some health effects can be:

Ingestion: Unlikely under normal industrial use, mildly abrasive to mouth and throat if swallowed.

Eye Contact: Dust is irritating to the eyes. Exposure to dust may aggravate pre-existing eye conditions. Particles impacting on the eye may cause eye injury.

Skin Contact: Dust may be mildly irritating and drying to the skin or abrasive due to its physical characteristics. 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: Dust is mildly irritating to the nose, throat and respiratory tract and may cause coughing and sneezing. 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. Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated. The product contains a proportion of respirable free crystalline silica in the quartz component. 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

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Sand forms a mildly acid / alkaline or neutral slurry when mixed with water; is non-toxic to aquatic & terrestrial organisms; and is not biodegradable.
Persistence and Degradability:	Product is persistent and would have a low degradability
Mobility:	A low mobility would be expected in a landfill situation.

13. DISPOSAL CONSIDERATIONS

Clean material can be re used. Dispose of waste material only in accordance with the applicable federal, state and local laws and regulations.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN Number:	None allocated
Hazchem Code:	None allocated
Dangerous Goods Class:	None allocated
Subsidiary Risk:	None Allocated

15. REGULATORY INFORMATION

Poisons Schedule: Not scheduled

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. Sand and crystalline silica itself is classified as non- Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. 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 to respirable crystalline silica dust 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).

16. OTHER INFORMATION

Emergency Contact Details: Poisons Information Centre 13 11 26

Additional Information:

Australian Standards References:

AS/NZS 1336 Recommended Practices for Occupational Eye Protection

AS/NZS 1715 Selection, Use and Maintenance of Respiratory Protective Devices

AS/NZS 1716 Respiratory Protective Devices

AS 2161 Industrial Safety Gloves and Mittens (excluding electrical and medical gloves)

National Code of Practice for the Preparation of Material

The data of this material safety data sheet are current at the time of issue and relate only to the materials and not to its use in combination with any other material or in any process. WA Salt Group disclaim responsibility for damages resulting from the use of or reliance upon the data of this material safety data sheet. No expressed or implied warranties are given other than those implied by Commonwealth, State or Territory legislation.