Safety Data Sheet (SDS) Quarry Products

Section 1: Identification: of the Material and Supplier

Product Name:	Quarry Products
Other Names:	Crushed Rock, Road Base, Aggregate, Fill, Quarry Dust
Recommended Use:	Quarry products are used in building and construction projects including road making and maintenance
Company:	BAHR Earthmoving Pty Ltd trading as Millewa Quarries
Address:	133 Cutler Lane, Koorlong. 3501
Postal:	PO Box 1070, Irymple VIC 3498
Phone:	03 5024 3631
Email:	office@millewaquarries.com.au
Emergency Contact	Poisons Information Centre 13 11 26

Section 2: Hazard Identification

Hazardous Substance / Non-Dangerous Goods:	
This product contains crystalline silica. Crystalline silica dust is classified as Hazardous according to Safe Work Australia and classified as Non Dangerous Goods according to the Australian Code for Transport of Dangerous Goods by Road and Rail. Dust in/on the supplied product or created when the product is cut, drilled, abraded or crushed may contain crystalline silica some of which may be respirable (small enough to reach deep into the lungs when inhaled.	
Warnings using Safe Work Australia Criteria:	
Risk Phrases:	R20 - Harmful by inhalation (applies to dust). R48 - Danger of serious damage to health by prolonged exposure through inhalation (applies to dust).
Safety Phrases:	S22 - Do not breathe dust
Globally Harmonised System of Classification and Labelling of Chemicals (GHS) Classification:	
	Eye Irritation Category 2B. Organ Damage Category 2.
GHS Criteria:	
Warnings:	H332 - Harmful if inhaled. H350i - May cause cancer by inhalation. H372 - Causes damage to organs (lungs) through prolonged or repeated exposure if inhaled.
Precautionary Statements:	P261 - Avoid breathing dust/fume/gas/mist/vapour spray. P304 + P340 - Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 - Call doctor/physician if you feel unwell.

Section 3: Composition / Information on Ingredients

Chemical Name:	Proportion (w/w):	CAS Number:
Crystalline Silica (Si02)	8%	14808-60-7

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. 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 irritation of the skin.
Inhaled:	Remove to fresh air, away from dusty area. If respiratory irritation occurs, seek immediate medical attention.
First Aid Facilities:	Eye wash station and normal wash-room facilities.
Advice to Doctor:	Treat symptomatically.

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 (HEPA Class H or M) to avoid making dust airborne. If spillage is to be swept or shoveled into containers, it should be wetted down with water to reduce dust generation. Recommendations on exposure control and personal protection should be followed during spill clean-up. See Section 8.

Section 7: Handling and Storage

Handling:	Avoid breathing dust. Respirable dusts can be generated during processing, handling and storage. Use control measures such as ventilation, enclosure of materials, covered loads on trucks, and wetting down material while in use and PPE.
Storage:	When stockpiling and handling large quantities of quarry or sand products, care should be taken to avoid steep faces on the stockpile, which can fall without warning.
Incompatibilities:	None.

Section 8: Exposure Controls / Personal Protection

Exposure Standards:	Safe Work Australia formally ASCC and National Occupational Exposure Standard (NES). Crystalline Silica (Quartz): 0.05mg/m3 time weighted average (TWA) as respirable dust. Airborne concentration of respirable crystalline silica that exceeds half the exposure standard (0.02mg/m3) for respirable crystalline silica, performed in connection with a crystalline silica process is deemed High Risk Crystalline Silica Work. Total dust (of any type, or particle size): 10 mg/m3 TWA. Dust must be kept to a minimum to ensure respirable dust level remains below NES.
Engineering Controls:	
Ventilation:	Avoid generating dust. The products should be made damp before use to reduce dust generation. Work in the open air where possible. Any activities which may generate dust must be performed in a well-ventilated space. Mechanical ventilation or local exhaust ventilation must be used if levels of respirable dust approach the NES. If dust generation cannot be avoided, personal respiratory protection is required.
Consideration for Repair & Maintenance of Contaminated Equipment:	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. Recommendations on Exposure Control and Personal Protection should be followed.
Personal Protective Equipment:	
Personal Hygiene:	Wash hands before eating, drinking, using the toilet, or smoking. Wash work clothes regularly.
Skin Protection:	Wear loose comfortable clothing and gloves (standard duty leather or equivalent AS 2161). Remove all contaminated clothing. Wash clothes regularly and separate from other clothes. Do not contaminate the home environment with dusty work clothes and shoes. Do not shake out work clothes before laundering.
Eye Protection:	Safety glasses with side shields or safety goggles (AS/NZ 1337) or a face shield should be worn.
Respiratory Protection:	Where engineering and handling controls are not enough to minimize exposure to total dust and to respirable crystalline silica, personal respiratory protection must be worn. Respiratory protection used must conform to AS/NZS 1716 and be used in accordance with AS/NZS 1715. An approved particulate “dust mask” either class P1 or P2, may provide the required minimum protection factor for the ambient dust level in most cases. Where high levels of dust are encountered, more efficient cartridge-type or powered air protection respirator (PAPR) may be necessary. Use only respirators that bear the Australian Standards mark and are fitted and maintained accordingly.

Section 9: Physical and Chemical Properties

Appearance:	Colour range is typically white to orange/brown. Shape and texture varies from smooth and rounded to angular and rough.
Odour:	Normally no odour.
pH:	8.3%
Vapour Pressure:	Not determined.
Boiling Point/Range:	Not determined.
Freezing/Melting Point:	Not determined.
Solubility:	Insoluble.
Density:	Ranges from 1.1 to 1.3 t/m3.
Flash Point:	Not applicable.
Flammability Limits:	Not applicable.
Ignition Temperature:	Not applicable.
Particle Size:	A proportion of the dust may be respirable (below 10µm) and if it becomes airborne constitutes an exposure if inhaled.

Section 10: Stability and Reactivity

Chemical Stability:	Chemically stable.
Conditions to Avoid:	Dust generation.
Incompatible Materials:	None.
Hazardous Decomposition:	None.

Section 11: Toxicological Information

Health Effects - Short Term (Acute) Exposure:	
Swallowed:	Unlikely to occur under normal conditions of use. Swallowing of dust may cause abdominal discomfort.
Eyes:	Dust is irritating to the eyes, causing watering and redness. Exposure to dust may aggravate pre-existing eye conditions.
Skin:	Dust may be mildly irritating and abrasive to the skin due to its physical properties.
Inhaled:	Dust is mildly irritating to the nose, throat and lungs, resulting in coughing and sneezing. Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.
Health Effects - Long Term (Chronic) Exposure:	
Eyes:	Dust may cause irritation and inflammation of the eyes and aggravate pre-existing eye conditions.
Skin:	Repeated heavy contact with dust may cause drying of the skin and can result in a rash (irritant contact dermatitis) typically affecting the hands. Over time this may become chronic and can also become infected.
Inhaled:	Repeated exposure to dust may result in increased nasal and respiratory secretions and coughing. High level exposures can increase the risk of bronchitis and pneumonia. Repeated inhalation of dust containing crystalline silica may result in an irreversible pulmonary fibrosis (scarring of the lung) termed silicosis, including acute or accelerated silicosis. Secondary infections such as bronchitis and tuberculosis are often associated with silicosis. It may also increase the risk of scleroderma (a disease affecting the skin, joints, blood vessels and internal organs) and other auto-immune disorders. Tobacco smoking is considered to increase the adverse effects of exposure to dust, including crystalline silica. Safe Work Australia classifies crystalline silica as a Hazardous Substance. Crystalline silica is recognised as a carcinogen by the International Agency for Research for Cancer (IARC).

Section 12: Ecological Information

Eco-toxicity:	Pose no ecological risk. Non-toxic to aquatic and terrestrial organisms and are biodegradable.
Persistence and Degradability:	Persistent and non-degradable.
Mobility:	Low mobility would be expected in a landfill situation.

Section 13: Disposal Considerations

Disposal:	Can be treated as a common waste for disposal or dumped into a landfill site in accordance with local authority guidelines. Recycling into construction activities is usually a practicable alternative. Measures should be taken to avoid dust generation during disposal and exposure and personal precautions should be observed (see above).

Section 14: Transport Information

UN Number:	None allocated.
UN Proper Shipping Name:	None allocated.
Class and Subsidiary Risk:	None allocated.
Packing Group:	None allocated.
Special Precautions for User:	See above.
HAZCHEM Code:	None allocated.

Section 15: Regulatory Information

Crystalline silica dust is classified as Hazardous according to Safe Work Australia formerly the ASCC (Approved Criteria for Classifying Hazardous Substances [NOHSC:1008] 3rd Edition).

Crystalline silica is recognised as a carcinogen by the IARC.

Exposure by inhalation to Crystalline Silica Dust is regulated under the Victorian:

- Occupational Health and Safety Amendment (Crystalline Silica) Regulations 2021
- Occupational Health and Safety Regulations 2017 Part 4.1—Hazardous Substances

Workers exposed to Crystalline Silica Dust at levels greater than 0.02 mg/m3 TWA, may be required to undertake health monitoring as per the Occupational Health and Safety Regulations 2017 Part 4.1—Hazardous substances Subdivision 2—Duties of employers, R169 Health Monitoring.

Section 16: Other Information

Australian Standards:

- AS/NZS 1337: Eye Protectors for Industrial Applications
- AS/NZS 1715: Selection, Use and Maintenance of Respiratory Protective Devices
- AS/NZS 1716: Respiratory Protective Devices
- AS/NZS 2161: Occupational Protective Gloves
- AS/NZS 60335.2.69 Household and similar Electrical Appliances - Safety Particular requirements for Wet and Dry Vacuum Cleaners, including Power Brush, for commercial use

Other References:

- Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals
- Guidance on the Classification of Hazardous Chemicals under the WHS Regulations
- Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004] 3rd Edition
- Workplace Exposure Standards for Airborne Contaminants December 2019
- Occupational Health and Safety Act 2004
- Occupational Health and Safety Regulations (Victoria) 2017
- Occupational Health and Safety Amendment (Crystalline Silica) Regulations 2021

Please Note:

This Safety Data Sheet (SDS) is issued by Millewa Quarries in accordance with National standards and guidelines from Safe Work Australia (SWA). The information in it must not be altered, deleted or added to. Millewa Quarries will not accept any responsibility for any changes made to its SDS by any other person or organization. Millewa Quarries will issue a new SDS when there is a change in product specifications and/or Standards, Codes, Guidelines, or Regulations.

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End of SDS.