ASQ (WHSE) Management System



# SDS 01 – Quarry and Sand Products

## SECTION 1: IDENTIFICATION OF MATERIAL AND SUPPLIER

### **COMPANY DETAILS**

Company: Allstone Quarries Pty Ltd ABN: 63 089 515 659 Address: 2-6 Festini Way, Long Gully, Victoria 3550 Telephone: 03 5446 1677 Fax: 03 5446 1227 Email: info@asg.net.au

#### **EMERGENCY CONTACT**

Emergency Number: 000 Poison Information Centre: 13 11 26

#### **PRODUCT DETAILS**

Product Name: Quarry and Sand Products

Other Names: Crushed Rock, Road Base, Crushed Concrete, Aggregate, Blue Metal, Rail Ballast, Rip Rap, Beaching Material, Fill, Quarry Dust, Hornfels, Concrete Sand, Recycled Sand (Glass).

Recommended Use: Quarry and sand products are used in building construction and other civil engineering activities such as road building and rail ballast.

### **SECTION 2: HAZARDS IDENTIFICATION**

### HAZARDOUS SUBSTANCE ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

### NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

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

#### Classification of the substance or mixture

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

#### Label elements

Signal word WARNING Pictograms



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# Hazard Statement(s)

H332 - Harmful if inhaled.

H373 - May cause damage to organs (lungs) through prolonged or repeated exposure (inhalation).

## **Prevention Statement(s)**

P260 - Do not breathe dust.

P272 - Contaminated work clothing should not be allowed out of the workplace.

# **Response Statement(s)**

- P312 Call doctor/physician if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- P363 Wash contaminated clothing before reuse.

# Storage Statement(s)

# **Disposal Statement(s)**

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

### **Other Hazards**

The hazard information provided in this Safety Data Sheet applies to the dusts within Silica Sand/Hornfels and particularly inhalable dust particles with a diameter less than 75 microns.

### Warnings using Safe Work Australia Criteria

### **Risk 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).

### Safety Phrases:

S22 – Do not breathe dust.

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#### **SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

MAJOR INGREDIENTS		
Name	CAS	Proportion
Sand		
Ingredients determined not to be hazardous	Not Required	0-99%
Containing Crystalline Silica (Silicon Dioxide SiO2)	14808-60-7	0-1%
Crushed Stone, Gravel	Not Required	0-100%
Hornfels		
Ingredients determined not to be hazardous	Not Required	0-65%
Containing Crystalline Silica (Silicon Dioxide SiO2)	14808-60-7	35-60%

# **OTHER INGREDIENTS MAY BE ADDED**

- Some quarry products are made by blending materials from one or more quarries/sources in order to meet the required physical properties or customer specification.
- Aggregates used for roadworks are often mixed with or coated with the below prior to delivery:

Name	CAS	Proportion
Portland Cement	65997-15-1	0-8%

- Some material sold as quarry products are made by recycling by products from building demolition and wash out waste from concrete operations.
- Depending on the source materials the Crystalline silica of any particular quarry product can range from 0-60%.

# **SECTION 4: FIRST AID MEASURES**

### Swallowed

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

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#### Eye

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### 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

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### 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

**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.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### THE FOLLOWING APPLIES TO DUST FROM THIS PRODUCT

### **Exposure Limits:**

Workplace Exposure Standards for Airborne Contaminants, Safe Work Australia.

- Exposure to dust should be kept as low as practicable, and below the following NES.
- Crystalline silica (quartz): 0.05 mg/m3 TWA (time –weighted average- 8 Hour) as respirable dust.
- Total dust (of any type, or particle size): 10 mg/m3 TWA.

All occupational exposures to atmospheric contaminants should be kept to as low as reasonably practicable and in all cases to below the Workplace Exposure Standard (WES).

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TWA (Time Weighted Average): the time-weighted average airborne concentration over an eighthour working day, for a five-day working week over an entire working life. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

# **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.
- Wear loose comfortable clothing and gloves (standard duty leather or equivalent compliant to AS/NZS 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.

### Eyes

• Safety glasses with side shields or safety goggles (AS/NZ 1337) or a face shield should be worn.

# **Respiratory:**

- 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.

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- Where high levels of dust are encountered, more efficient cartridge-type or powered respirators or supplied-air helmets may be necessary. Use only respirators that bear the Australian Standards mark and are fitted and maintained accordingly.
- 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:	May range from fine brown/green & white grains (sand) to		
	large dark rock (aggregate/roadbase)		
Odour:	None		
pH:	3.0 - 10.0		
Vapour Pressure:	Not determined		
Vapour Pressure:	Not determined		
Boiling Point/Range:	Not determined		
Freezing/Melting Point:	Not determined		
Solubility:	Not soluble		
Density:	2.2 - 2.7 t/m3 (water=1)		
Flash Point:	Not applicable		
Flammability Limits:	Not applicable		
Ignition Temperature:	Not applicable		
Particle Size:	A proportion of the dust may be respirable (below 10 $\mu\text{m})$ and if it		
	becomes airborne constitutes an exposure if inhaled.		

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# 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 Exposure

#### 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 Exposure

### Eyes

• Dust may cause irritation and inflammation of the eyes and aggravate pre-existing eye conditions.

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#### 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).
- Safe work Australia workplace exposure standards for airborne contaminants classifies RCS as Category 1A (Carc. 1A) -Known to have carcinogenic potential for humans.

**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.

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# SECTION 12: ECOLOGICAL INFORMATION

# AGGREGATES, ROADBASE, SAND, FILL

**Ecotoxicity:** Quarry Products 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

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#### **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 Safework Australia (formerly ASCC/NOHSC) Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)] 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 SWA (ASCC/NOHSC documentation).

#### **SECTION 16: OTHER INFORMATION**

**Contact:** For further information, please contact the Site Manager from one of the following sites.

#### ASQ Allstone Quarries – Newbridge Quarry

Wimmera Highway Newbridge, Victoria 3551 Phone: 03 5435 2092 Email: <u>newbridge@asg.net.au</u>

#### ASQ Garden & Landscape – Eaglehawk

Alexandra Street Eaglehawk, Victoria 3556 Phone: 03 5446 1292 Email: <u>reception@asq.net.au</u>

### ASQ Garden & Landscape – Castlemaine

Corner of Langslow and Martin Streets Castlemaine, Victoria 3450 Phone: 03 5472 4053 Email: castlemaine@asg.net.au

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#### Authorised by:

Name: Tim Bird KU Signature:

Title: Managing Director Date: 24/08/2021

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### END OF SDS

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