Safety Data Sheet (SDS)

Quartz Sandstone

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product:	Sandstone
Other Names:	Crushed Sandstone, 53CSS, 75CSS, 20CSS, sandstone sand, sandstone ballast, sandstone cladding, sandstone capping, sandstone logs, sandstone billets, sandstone pavers, rock face sandstone, sandstone sculptures, dimensional sandstone
Use:	Sandstone in all the above forms is used in building construction, civil construction, landscaping, paving and decorative.
Company Details:	Gosford Quarries Pty Ltd
Address:	70 Quarry Road, Somersby NSW 2250
Tel:	Tel: (02) 4340 3000
Website:	www.gosfordquarries.com.au
Emergency:	Poisons Information Centre 13 11 26
Emergency Services:	000

SECTION 2: HAZARD(S) IDENTIFICATION

Hazard Classifications: HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

This product contains crystalline silica, a substance classified as hazardous in accordance with the Approved Criteria for Classifying Hazardous Substances (GHS08).

While stone poses no health hazard under normal conditions, mechanical processing activities such as cutting, grinding, drilling, carving, sanding, polishing, and cleaning may generate airborne dust containing respirable crystalline silica. Inhalation of this fine particulate matter may cause irritation to the eyes, skin, and respiratory system, and prolonged or repeated exposure can lead to serious health conditions, including diminished pulmonary function and irreversible lung disease. As natural stone may contain variable concentrations of microcrystalline silica, personnel engaged in such operations must be made aware of the associated risks and ensure that appropriate control measures, including engineering controls and the use of personal protective equipment (PPE), are in place prior to commencing work.

Signal Word: Danger

GHS08 (Health Hazard)
Category 1A (Carcinogenicity) (H350, H372) Chronic health hazards; this includes aspiratory and respiratory hazards, carcinogenicity, mutagenicity and reproductive toxicity

GHS07 (Health Hazard)
Category 3 (Respiratory tract irritation) (H319, H335)
Low level toxicity. This includes respiratory, skin, and eye irritation, skin sensitisers and chemicals harmful if swallowed, inhaled or in contact with skin

Dust Hazard Sign

HAZARD STATEMENTS:

H350: May cause CANCER (inhalation)

H372: Causes damage to organ (lungs) through prolonged and repeated exposure if inhaled

H319: May cause eye irritation

H335: May cause respiratory tract irritation

PREVENTIONS STATEMENTS:

P202: Do not handle until all safety precautions have been read and understood

P260: Do not breathe in dust particles generated during processing, working and cleaning

P264: Wash face and hands thoroughly after handling

P270: Do not eat, drink or smoke when using this product

P271: Mechanically alter (e.g. cut, grind, drill) only outdoors or in a well-ventilated area

P281: Use appropriate PPE when mechanically altering

P284: Wear respiratory protection for particles (P2 filters or higher)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product:	Quartz Sandstone	
CAS Number:	14808-60-7	
Major Ingredients:	Quartz (Crystalline Silica)- SiO2	60-70%
	Impurities (clay, kaolinite etc.)	30-40%
Origin:	Naturally occurring extractive and extracted material	

P314:	Get medical advice/attention if you feel unwell after working with the product

Inhalation:	Inhalation of dust from this product may have an immediate or delayed effect to irritate, inflame or sensitivities to the nose, throat and lungs and exacerbate pre- existing conditions such as asthma and bronchitis. The repeated inhalation of dust from these products may lead to asthma, bronchitis, cancer, pneumonia, silicosis. Remove the affected party or remove the source of contamination
Skin Contact:	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
Eye Contact:	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor or for at least 15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart an away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay if symptoms such as irritation or redness or pain persists
Ingestion:	Swallowing this product may cause immediate or delayed abdominal discomfort and potentially increase the risk of gastro intestinal infections. Rinse mouth and lips with water. Do not induce vomiting. If symptoms persist seek medical attention
First Aid Facilities:	Eye wash and normal washroom facilities. Contact Poisons Information Centre
Notes	Provide general supportive measures and treat symptomatically. Keep victim under observation as a symptom may be delayed. Ensure that medical personnel and first aiders are aware of the materials involved and take appropriate precautions to protect themselves. Pre-existing medical conditions may be aggravated by the exposure. Personnel with eye, skin and lung conditions, as well as tobacco smoking should avoid further exposure.

RESPONSE PRECAUTIONARY STATEMENTS:

P304+P340:	IF INHALED:	Move person to fresh air and keep comfortable for breathing.
P302+P350:	IF ON SKIN:	Wash with plenty of soap and water.
P333+P313:	IF SKIN IRRITATION/RASH OCCURS:	Seek medical advice/attention.
P305+P351+P338:	IF IN EYES:	Rinse cautiously with water for several minutes, remove contact lenses if present and easy to do. Continue rinsing.

DISPOSAL PRECAUTIONARY STATEMENTS:

P501:	Dispose of products and by products according to local, regional, national and international regulations

SECTION 5: FIRE FIGHTING MEASURES

Flammability:	Not flammable
Hazards from Combustion products:	None
Suitable Extinguishing Media:	Non-combustible, non-flammable material, use fire extinguishing media appropriate for surrounding materials
Equipment for fire fighters:	Use appropriate protective equipment for surrounding materials. No specific precautions noted as the product is an inert material.
Hazchem code:	None allocated

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment & Emergency Procedure: Refer to Section 8

Environmental Precautions:

- □ Do not discharge into sewer or waterways
- □ Advise the relevant environmental authorities if a spill occurs

Methods & material for containment and cleaning up:

- □ Secure the site by covering the material with a sheet/tarpaulin secured to the ground in order to protect against dust emissions and gravitational flows into waterways
- □ Bunding the area and cover drains to protect against over ground run off in waterways, surrounding land and drainage systems
- □ Dust is best cleaned up by vacuum device to avoid making dust airborne. Wetting down before sweeping up dust to avoid making dust airborne may be a useful control measure
- □ Re-use where possible
- □ Advise the RMS if a spill occurs from a transport vehicle 132 701
- □ Refer to Section 8 for Exposure Controls and Personal Protection

SECTION 7: HANDLING AND STORAGE

Safe Handling:

- □ Use in a well-ventilated area
- □ Wear personal protective equipment when handling (P2 mask, eye protection)
- □ Applying water as near as possible to the point where dust is generated to prevent it from becoming airborne
- □ Limit exposure to the product if dusty and windy
- □ Regularly vacuum enclosed areas and/or install a dust extraction system
- □ Wash hands and face before eating, drinking, or smoking. Regular cleaning of work clothes and proper shower facilities at the site help reduce dust transfer to other areas, including workers homes.

Storage Precautions: No special storage requirements - Store in ventilated area if applicable.

Transport: Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code), Edition 7.9.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards

As set out by Safe Work Australia, the Workplace Exposure Standards for Airborne Contaminants (updated October 2024) and the guidance document Working with Crystalline Silica Substances (July 2024) outline the following Occupational Exposure Limits (OELs) based on Time-Weighted Averages (TWA):

Substance	TWA (8- Hour average)
Respirable Crystalline Silica:	0.05mg/m³
Mica	2.5mg/m³
Inhalable Dust:	10mg/m³

TWA (Time-Weighted Average): The average airborne concentration of a substance calculated over an 8-hour working day and a 5-day working week.

mg/m³: Milligrams of substance per cubic metre of air.

Engineering Controls

Work Area

- □ Use in a well-ventilated area
- □ Consider a Local Exhaust Ventilation (LEV) system
- □ Practice good house keeping
- □ Avoid dry sawing, cutting, trimming or grinding of the solid matter. Use of water suppression and/or wet cutting, wet grinding are good control methods for the dust generated by the above activities.

Personal Protection

Eye Protection:	Safety glasses with side shields or safety goggles (AS/NZ 1336)
Skin Protection:	Long sleeves, long pants and see below hands & feet protection
Hands/Feet Protection:	Cotton gloves, leather gloves, safety footwear (steel caps)
Inhalable Protection:	Avoid breathing generated dust, If unavoidable, wear P1 or P2 respirators (AS/NZ 1715)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Ranges from fine grain crushed sandstone to landscape pavers to large boulders/blocks. The colour can vary from white, yellow, light browns, dark browns and other colour ranges
Odour:	No odour
pH:	3 - 10
Electrical Conductivity:	Not determined
Vapour Pressure:	Not determined
Vapour Density:	Not determined
Boiling Point/Range:	Not determined
Freezing/Melting Point:	Not determined
Solubility:	Not soluble
Specific gravity/Density:	2.0 – 2.6 Tonnes per Cubic Metre (t/m3)
Flash Point:	Not applicable
Flammability Limits:	Not flammable
Particle Size:	Dust may be respirable i.e. below 10 microns

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	See Section 7
Chemical Stability:	Product is considered stable
Hazardous Reactions:	None – Under normal use conditions
Physical Stability:	Material breakages on Strong Impact
Conditions to Avoid:	Avoid Dust generation
	Avoid contact with strong oxidizing agents – risk of fire and explosions
	Avoid extreme heat (>800°C) – risk of polymorphic or phase transformation to tridymite or cristobalite ~870–1470°C
Incompatible Materials:	Strong oxidizing agents
Hazardous Decomposition Products:	Silica dissolves in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride

SECTION 11: TOXICOLOGICAL INFORMATION

Acute health Effects (Short Term)

Ingestion:	Is unlikely due to the physical form of the product. However, swallowing any amount of this product may potentially increase the risk of gastro intestinal infections.
Eyes:	Dust can be irritating to the eyes. Exposure to dust may aggravate and irritate the eye causing redness, watering and possible infection.
Skin:	Dust may be irritating and drying to the skin. Dust may lead to immediate or delayed skin irritations, sensitisation, dermatitis and/or infection
Inhalable:	Inhalation of dust may cause an immediate or delayed effect to irritate, inflame or sensitise the nose, throat and lungs. Pre-existing conditions such as asthma and bronchitis may be aggravated.
	Prolonged inhalation of dust (respirable of a particle size <5 microns 0.005mm) can cause cancer or pneumoconiosis (silicosis), a disease that results in formation of fibrotic tissue in the lungs. Refer to Section 8 on Exposure Standards.

Chronic Health Effects (Long Term)

Inhalable:	Long term repeated exposure to high dust concentrations may lead to respiratory irritation, inflammation or sensitization and illnesses such as asthma, bronchitis, cancer, pneumonia or other pneumonia like illnesses.
	Long term exposure above the Occupational Exposure Limit (OEL) for respirable crystalline silica (RCS) carries the risk of causing serious and irreversible lung diseases, including bronchitis and silicosis, including acute and/or accelerated silicosis.
	The International Agency for Research on Cancer (IARC) has classified Respirable Crystalline Silica (RCS) as being a Group 1 Carcinogen for lung cancer, chronic obstructive pulmonary disease.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Natural quarry products pose no ecology risk. They are non-toxic to aquatic and terrestrial organisms and are not biodegradable
Persistence & Degradability:	This product is persistent and is non-degradable
Mobility:	Only mobile in significant wind and water

While the product is insoluble in water and unlikely to be toxic, the release of dust or fine particles into waterways may elevate total suspended particulate (TSP) levels, potentially impacting sensitive aquatic species

SECTION 13: DISPOSAL CONSIDERATIONS

Product / Packaging Disposal:

- □ Recycle wherever possible by engaging licensed recycling tip sites and local facilities
- □ Consult manufacturer for recycling options
- □ Ensure safe disposal practices when exposed to dust. Refer to Section 7 and Section 8

SECTION 14: TRANSPORT INFORMATION

UN Number:	None
UN Proper Shipping Name:	None
Class and Subsidiary Risk	None
Packing Group	None
Hazchem Code	None
Special Precautions for User:	Trucks to strap and secure firmly. Use a tarpaulin to cover the load when carting crushed sandstone

SECTION 15: REGULATORY INFORMATION

Crystalline Silica is found on the following regulatory lists:

- □ Australia Exposure Standards
- □ Australia Inventory of Chemical Substances (AICS
- □ International Agency for Research on Cancer (IARC)
- □ Australia Hazardous Chemical Information System (HCIS)
- □ Safe Work Australia
- □ Australian Safety and Compensation Commission (ASCC)

SECTION 16: OTHER INFORMATION

Revision Date:	25/04/2030
Initial Date:	25/04/2025

Definitions and Abbreviations:

mg/m³:	Milligrams of substance per cubic metre of air	**WHS:**	Work Health and Safety
TWA:	Time Weighted Average	**WHO:**	World Heath Organization

OEL:	Occupational Exposure Limit	**OSHA:**	Occupational Safety And Health Administration
IARC:	International Agency for Research on Cancer RCS	**Inhalable Dust**:	Particles are less than 0.1mm in diameter and can be easily seen. Particles are breathed in but trapped in the mouth, nose or upper part of the respiratory tract
Respirable Dust:	Particles (non-classified) are less than 0.005mm and are invisible to the naked eye. Particles are breathed in and retained in the lung and penetrate deep into the lung (alveolar region) where gas exchange take place.	**Respirable Crystalline Silica:**	Quartz is the most common form of crystalline silica and is the second most common mineral on the earth's surface. Crystalline forms of silica have been associated with a variety of diseases primarily affecting the lungs. RCS is the respirable dust fraction of crystalline silica

Important Note: This SDS is a hazard communication tool and should be used to assist in the Risk Assessment. We believe the information contained in this SDS is accurate and is given in good faith, but no warranty is expressed or implied is made. This SDS is uncontrolled when emailed, printed or any other form of copy.