Safety Data Sheet

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name **QUARRY PRODUCTS**

Synonyms AGGREGATES ● ARMOR ROCK ● BALLAST ● CAPPING ● CRUSHER DUST ● DRAINAGE AGGREGATES ● FILL ● GABION ● LANDSCAPING ● MANUFACTURED SAND ● ROAD BASE ● SPALLS

1.2 Uses and uses advised against

Uses INDUSTRIAL & COMMERCIAL APPLICATIONS

1.3 Details of the supplier of the product

Supplier name **BORAL AUSTRALIA**

Address Triniti T2, Level 3, 39 Delhi Road, North Ryde, NSW, 2113, AUSTRALIA

Telephone (02) 9220 6300

Website http://www.boral.com.au

1.4 Emergency telephone numbers

Emergency 13 11 26 (Poisons Information Centre)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Physical Hazards

Not classified as a Physical Hazard

Health Hazards

Carcinogenicity: Category 1A
Specific Target Organ Toxicity (Repeated Exposure): Category 2

Environmental Hazards

Not classified as an Environmental Hazard

2.2 GHS Label elements

Signal word **DANGER**

Pictograms

Hazard statements

H350i May cause cancer by inhalation.
H373 May cause damage to organs through prolonged or repeated exposure.

Prevention statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response statements

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage statements
None allocated.

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

2.3 Other hazards
The hazard information provided in this Safety Data Sheet applies to the dusts within Quarry Products and particularly inhalable dust particles with a diameter less than 75 microns.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
AGGREGATE and DUST MAY CONTAIN >1% QUARTZ (CRYSTALLINE SILICA)	14808-60-7	238-878-4	<100%

Ingredient Notes 1. Quarry Products are supplied from naturally occurring materials excavated and processed at sand pits, gravel pits and hard rock quarries. Depending upon the source materials, the quarry product may contain varying amounts of quartz (crystalline silica).
2. Although rare, some Quarry Products may contain trace amounts (<0.01% w/w) of Respirable Elongated Mineral Particulates (REMP). The levels of naturally occurring REMP are determined to be well below the threshold level for classification.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Health Professional, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water till dust removed. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion Due to product form and application, ingestion is considered unlikely.

First aid facilities Eye wash facilities and safety shower are recommended.

4.2 Most important symptoms and effects, both acute and delayed
Chronic exposure to respirable crystalline silica may result in lung fibrosis (silicosis), and Chronic Obstructive Pulmonary Disease (COPD). Chronic exposure to non-Quartz mineral dusts may also result in COPD. Principal symptoms of silicosis and COPD are cough and breathlessness. Respirable Crystalline Silica (RCS) is classified as carcinogenic to humans (IARC Group 1). Chronic exposure to Respirable Elongate Mineral Particles may result in lung disease, and the risk of lung cancer is increased for smokers.

4.3 Immediate medical attention and special treatment needed
Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media
Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture
Non-flammable.

5.3 Advice for firefighters
Non-flammable, treat surrounding fires as per their requirements.

5.4 Hazchem code
None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
If dust is or could be present, wear Personal Protective Equipment (PPE) as detailed in Section 8 of this SDS. Clear area of all unprotected personnel. Ventilate area where possible.

6.2 Environmental precautions
Prevent product from entering drains and waterways.

6.3 Methods of cleaning up
Contain spillage, then collect and place in suitable containers for disposal. Avoid generating dust.

6.4 Reference to other sections
See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Use of safe work practices are recommended to avoid eye or skin contact and inhalation.

7.2 Conditions for safe storage, including any incompatibilities
All stockpiles and dumps should be managed to avoid dust generation (highly recommended - moisture addition to surfaces, especially disturbed faces), run-off, or the risk of collapse.

7.3 Specific end uses
Not recommended for household use. This product contains more than 1% crystalline silica and is considered a Crystalline Silica Substance as specified in Victoria's Occupational Health and Safety Amendment (Crystalline Silica) Regulations 2021, S.R. No. 137/2021.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Quartz (respirable dust)	SWA [AUS]	--	0.05	--	--

Biological limits
No biological limit values have been entered for this product.

8.2 Exposure controls
Engineering controls All work should be carried out in such a way as to minimise dust generation (recommend dampening of material and stockpile surfaces), and eliminate lung exposure to dust. Dust suppression and/or extraction may be used, if necessary, to control airborne dust levels. Work areas should be cleaned regularly, especially prior to conducting maintenance activities. Maintain respirable dust and Quartz (Respirable Crystalline Silica) levels below the recommended exposure standards (see 8.1 above).

PPE

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Eye / Face	Wear safety glasses or dust-proof goggles when handling material to avoid contact with eyes. Refer to AS/NZS 1336.
Hands	Where hands are subject to "dry skin" or "skin tears", wear PVC, rubber or cotton gloves. Refer to AS/NZS 2161.
Body	Wear long sleeved shirt and full-length trousers.
Respiratory	Personal respiratory protection may be required where dust is airborne. The type of respiratory protection required depends primarily on the concentration of the inhalable and respirable dust in the air, and the frequency and length of exposure time. A suitable 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. Dust control measures providing respiratory protection against crystalline silica dust will also minimise and control any exposure to Actinolite.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	SOLID (COLOUR, SHAPE AND TEXTURE DEPENDS ON SOURCE OF RAW MATERIAL)
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT RELEVANT
pH	NOT AVAILABLE
Vapour density	NOT RELEVANT
Relative density	NOT AVAILABLE
Solubility (water)	INSOLUBLE
Vapour pressure	NOT RELEVANT
Upper explosion limit	NOT AVAILABLE
Lower explosion limit	NOT AVAILABLE
Partition coefficient	NOT RELEVANT
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT EXPLOSIVE
Oxidising properties	NON OXIDISING
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

This material is considered inert.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to avoid

Avoid dust generation. Do not use compressed air to clean surfaces of dust. Use vacuum or wet methods.

10.5 Incompatible materials
Incompatible with strong acids (e.g. hydrochloric acid).

10.6 Hazardous decomposition products
This material will not decompose to form hazardous products.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	This product is expected to be of low acute toxicity. Under normal conditions of use, adverse health effects are not anticipated.
Skin	Contact may result in mechanical irritation, redness, rash and dermatitis.
Eye	Contact may result in mechanical irritation, lacrimation and redness.
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Mutagenicity	Insufficient data available to classify as a mutagen.
Carcinogenicity	This product contains crystalline silica which is classified as carcinogenic to humans (IARC Group 1). However, there is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore, preventing the onset of silicosis will also reduce the cancer risk. There is also information that concludes the risk of lung disease in smokers is greatly increased when combined with dust exposures. The level of health risk posed by Respirable Elongated Mineral Particles continues to be debated internationally and there is no agreed position on the health risk posed, therefore a precautionary approach is considered appropriate.
Reproductive	Insufficient data available to classify as a reproductive toxin.
STOT - single exposure	Not classified as causing organ damage from single exposure.
STOT - repeated exposure	Repeated exposure to respirable silica above the regulated exposure standard may result in pulmonary fibrosis (silicosis) and COPD. Silicosis is a fibronodular lung disease caused by deposition in the lungs of fine respirable particles of crystalline silica. Exposure to silica at levels that appear not to cause overt silicosis can cause chronic bronchitis and chronic obstructive airways disease.
Aspiration	This product is a solid and aspiration hazards are not expected to occur.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
The main component/s of this product are not anticipated to cause any adverse effects to the environment.

12.2 Persistence and degradability
Product is persistent and non-degradable.

12.3 Bioaccumulative potential
This product is not expected to bioaccumulate.

12.4 Mobility in soil
A low mobility would be expected in a landfill situation.

12.5 Other adverse effects
Avoid contamination of drains and waterways.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal	Ensure product is kept damp, or covered with moist soil to prevent dust generation and dispose of to approved Council Landfill. Contact the manufacturer/supplier for additional information.
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

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

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None allocated.	None allocated.	None allocated.
14.2 Proper Shipping Name	None allocated.	None allocated.	None allocated.
14.3 Transport hazard class	None allocated.	None allocated.	None allocated.
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

Not a Marine Pollutant.

14.6 Special precautions for user

Hazchem code None allocated.

Other information Avoid contamination of drains and waterways. Minimise ambient dust generation. In transit, highly recommend the dampening of load surface and covering of load. Moisture content should be constrained in order to prevent leakage from tail gates.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

Inventory listings **AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)**
All components are listed on AIIC, or are exempt.

16. OTHER INFORMATION

Additional information

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

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[End of SDS]

Revision Information

Revision History

Revision	Date	Description
3.5	11/01/2023	Full SDS Review
3.4	27/06/2022	Standard SDS Review
3.3	01/08/2019	Standard SDS Review
3.2	10/01/2019	Standard SDS Review
3.1	07/01/2019	Standard SDS Review
3	31/07/2018	Standard SDS Review
2	14/03/2018	Standard SDS Review
1	06/05/2016	Initial SDS Creation

Review Team

SME Reviewers	Subject Matter
National Technical Manager - Quarry	Quality
H&S Business Partner - Quarry	Health & Safety
Environmental Sustainability Manager	Environment & Community
Mobile Asset Manager - Quarry	Transport & Dangerous Goods
National Health & Hygiene Manager	Health & Hygiene
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