



SAFETY DATA SHEET

Victor Harbor Quarries Aggregate Products

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	Victor Harbor Quarries
Other Names:	Railway Ballast, Aggregates (concrete etc.), Roadbase, Quarry Sand, Fill, Gravel
Recommended Use:	Ballast ,aggregates, Roadbase, Quarry Sand, Fill and Gravel are widely used in residential building, commercial building, civil engineering and construction projects.
Applicable In:	Australia
Supplier:	Victor Harbor Quarries
Address:	
Telephone:	
Facsimile:	
Website:	
Emergency Phone Number:	000 Fire Brigade and Police (available in Australia only)
Poisons Information Centre:	13 11 26 (available in Australia only)

This Safety Data Sheet (SDS) is issued by the Supplier in accordance with National standards and guidelines from Safe Work Australia (SWA – formerly ASCC/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 SDS by any other person or organization. The Supplier will issue a new SDS when there is a change in product specifications and/or Standards, Codes, Guidelines, or Regulations.

SECTION 2: HAZARD IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE: The products as supplied are **non -Hazardous** according to the Approved Criteria For Classifying Hazardous Substances [NOHSC:1008] 3rd Edition.

Holcim Aggregate Products are classified as **Non-Dangerous** Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Dust of these products contains crystalline silica, some of which may be respirable (particles small enough to go into the deep parts of the lung when breathed in), and which is **Hazardous**.

The following risk and safety phrases refer **ONLY** to the dust of these products:

Risk Phrases	Safety Phrases
R48/20: Danger of serious damage to health by prolonged exposure through inhalation.	S22: Do not breathe dust.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	Synonyms:	Proportion:	CAS Number:
Aggregate containing crystalline silica (quartz)	Sand, crushed stone, gravel, slag	100%	14808-60-7

Note: VHQ Aggregate Products are mostly supplied from naturally occurring materials excavated and processed at sand pits, gravel pits and hard rock quarries. Some quarry products (particularly roadbase products) are made by blending materials from two or more pits and quarries in order to meet the required physical properties or customer specification. Aggregates for road sealing are often pre-coated with a mixture of bitumen and diesel fuel prior to use, either prior to delivery from the quarry or later at a roadside stockpile. Some materials sold as quarry products are made by recycling by-products from other industries such as reprocessing concrete from building demolition and slag from blast furnaces that produce iron and steel. Depending upon the source materials, the crystalline silica (quartz) content of any particular quarry product can be up to 100%.

SECTION 4: FIRST AID MEASURES

The following advice refers mainly to exposure to dust coming from the product.

Swallowed:	Rinse mouth and lips with water. Do not induce vomiting. If symptoms persist, seek medical attention.
Eyes:	Flush thoroughly with flowing water for 15 minutes to remove all traces. Do not attempt to remove solid particles embedded in the eye. 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 or burning of the skin.
Inhaled:	Remove to fresh air, away from dusty area. If symptoms persist, seek medical attention.
Advice to Doctor:	Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Flammability:	Non-flammable
Suitable extinguishing media:	Use carbon dioxide, foam, dry chemical or water spray as required for fire in surrounding materials.
Hazards from combustion products:	None
Special protective precautions and equipment for fire fighters:	None
HAZCHEM Code:	None allocated

SECTION 6: ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and clean up:	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

Precautions for safe handling:	Manual handling should be in accordance with Manual Handling Regulations and Codes.
Conditions for safe storage:	Avoid breathing dust. Respirable dusts can be generated during processing, handling, and storage. When stockpiling and handling large quantities of products, 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 possibly suffocation.
Incompatibilities:	None

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards:	<p>Workplace Exposure Standards for Airborne Contaminants, Safe Work Australia</p> <p>Crystalline silica (quartz): TWA – 0.1 mg/m³ respirable dust (□ 7 microns particle equivalent aerodynamic diameter)</p> <p>Total dust (of any type, or particle size): TWA -10 mg/m³</p>
Notes on Exposure Standards:	<p>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).</p> <p>TWA (Time Weighted Average): the time weighted average airborne concentration over an eight-hour working day, for a fiveday 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.</p>
Biological Limit Values:	No biological limit allocated.
ENGINEERING CONTROLS	
Ventilation:	The products should be made damp before use to reduce dust generation. Work in the open air where possible. 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.
Special Consideration for Repair &/or 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 PROTECTION	
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).
Eye Protection:	Safety glasses with side shields or safety goggles (AS/NZ 1336) or a face shield should be worn.
Respiratory Protection:	<p>None required if engineering and handling controls are adequate to minimize dust generation and dust exposure (e.g. products kept damp). Where engineering and handling controls are not enough to minimise exposure to dust personal respiratory protection may be required.</p> <p>The type of respiratory protection required depends primarily on the</p>

	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.
--	---

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	The products are typically blue/grey in colour. Shape and texture varies from smooth and rounded to angular and rough.
Odour:	None
pH, at stated concentration:	Approximately 7
Vapour Pressure:	Not applicable
Vapour Density (air = 1):	Not applicable
Boiling Point/Range (°C):	Not applicable
Melting Point (°C):	Not applicable
Solubility in water:	Insoluble
Specific Gravity (H₂O = 1):	2.0 – 3.0
Flash Point:	Not applicable
Flammable (Explosive) Limits:	Not applicable
Autoignition Temperature:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions
Conditions to avoid:	Dust generation
Incompatible Materials:	None
Hazardous Decomposition Products:	None
Hazardous Reactions:	None

SECTION 11: TOXICOLOGICAL INFORMATION

No specific toxicology data available, but toxicity of this product is anticipated to be low with LD50 >5,000mg/kg. Health effects information is based on reported effects in use from overseas and Australian reports.

Health Effects: Acute (short term)

Swallowed:	Unlikely under normal industrial use. Mildly abrasive to mouth and throat if swallowed.
Eyes:	Dust is irritating and may cause redness and watering. Exposure to dust may aggravate pre-existing eye conditions.
Skin:	Dust may be mildly irritating and drying to the skin, or abrasive, 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.
--	----------------

Health Effects: Chronic (long term)

Eyes:	Dust may cause irritation and inflammation of the eyes and aggravate pre existing eye conditions.
Skin:	Repeated heavy contact 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 fine 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. Existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.

Additional Notes

Long Term Effects:	<p>Long term occupational over-exposure or prolonged breathing in (or inhalation) of crystalline silica dust at levels above the WES carries the risk of causing serious and irreversible lung disease, including bronchitis and silicosis (scarring of the lung). 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. IARC have recently classified respirable crystalline silica dust as carcinogenic to humans (IARC Group 1). This means it may can cause lung cancer. In the case of generated dust, the recommended controls outlined in Section 8 should be followed.</p> <p>Following considerable research and consultation with Government authorities, Holcim considers low exposures to aggregate dust containing such traces are without risk to health.</p>
Special Toxic Effects:	Inhalation of dust, including crystalline silica dust, is considered by medical authorities to increase the risk of lung disease due to tobacco smoking.

SECTION 12: ECOLOGICAL INFORMATION

Eco-toxicity:	Products as delivered are not biodegradable, have low ecotoxicity and are not regarded as posing any ecological risk. Crushed products and dust may form mildly alkaline or neutral slurry when mixed with water.
Persistence and Degradability:	Product is persistent and has a low degradability.
Mobility:	A low mobility would be expected in a landfill situation.

SECTION 13: DISPOSAL CONSIDERATIONS

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

SECTION 14: TRANSPORT INFORMATION

UN number:	None allocated
UN Proper Shipping Name:	None allocated
Class and Subsidiary Risk :	None allocated

Packaging Group:	None allocated
Special Precautions for User:	None
HAZCHEM code:	None allocated

SECTION 15: REGULATORY INFORMATION

Poisons Schedule:	Not scheduled
Exposures by inhalation to high levels of dust may be regulated under the Hazardous Substances Regulations (State) as they are applicable to Respirable Crystalline Silica, requiring exposure assessment, controls and health surveillance (ASCC/NOHSC).	

SECTION 16: OTHER INFORMATION

Date of revision of this SDS:	July 2014
--------------------------------------	-----------

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)

Other References:

NOHSC:1008 (2004)	Approved Criteria for Classifying Hazardous Substances
NOHSC:10005 (1999)	List Of Designated Hazardous Substances, April 1999, National Occupational Health and Safety Commission, Sydney.
NOHSC:2007 (1994)	National Code of Practice for the Control of Workplace Hazardous Substances (Australian States have similar Codes of Practice in each State).
Model Code of Practice	Preparation of Safety Data Sheets for Hazardous Chemicals, December 2011, Safe Work Australia.
Model Code of Practice	Labelling of Workplace Hazardous Chemicals, December 2011, Safe Work Australia.
ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th edition, National Transport Commission.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 3rd revised edition, United Nations, New York and Geneva, 2009.
WES	Workplace Exposure Standards For Airborne Contaminants, April 2013, Safe Work Australia.
WES	Guidance On The Interpretation Of Workplace Exposure Standards For Airborne Contaminants, April 2013, Safe Work Australia.

Whilst the information contained in this document is based on data which, to the best of our knowledge, was accurate and reliable at the time of preparation, no responsibility can be accepted by us for errors and omissions. The provision of this information should not be construed as a recommendation to use any of our products in violation of any patent rights or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us for any loss or damage caused by any person acting or refraining from action as a result of this information.

END OF SDS