

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** QUARTZ  
**Synonym(s)** QUARTZ ROCK • SIMCOA QUARTZ

### 1.2 Uses and uses advised against

**Use(s)** AGGREGATE • DECORATIVE STONE • RAW MATERIAL • ROAD BALLEST

### 1.3 Details of the supplier of the safety data sheet

**Supplier name** SIMCOA OPERATIONS PTY LTD  
**Address** 973 Marriott Rd, Wellesley, WA, Australia, 6233  
**Telephone** 08 9780 6661  
**Fax** Not supplied  
**Email** craigwallis@simcoa.com.au  
**Website** <http://www.simcoa.com.au>

### 1.4 Emergency telephone number(s)

**Emergency** 0408901179

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

### 2.2 Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

### 2.3 Other Hazards

The solid product as supplied is classified as non-hazardous under normal conditions and does not present an inhalation, ingestion, skin, or eye hazard. However, dust created when the product is cut, grinded and machined may contain crystalline silica some of which may be respirable (particles small enough to go into deep parts of the lung when breathed in).

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

### 3.1 Substances / Mixtures

Ingredient	CAS number	EC number	Content
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	238-878-4	>90%
ALUMINIUM OXIDE	1344-28-1	215-691-6	Not Available
CALCIUM OXIDE	1305-78-8	215-138-9	Not Available
IRON OXIDE (FE2O3)	1309-37-1	215-168-2	Not Available
SODIUM OXIDE	1313-59-3	215-208-9	Not Available
POTASSIUM OXIDE	12136-45-7	235-227-6	Not Available

## 4. FIRST AID MEASURES

Product name **QUARTZ**

#### **4.1 Description of first aid measures**

<b>Eye</b>	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
<b>Inhalation</b>	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
<b>Skin</b>	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
<b>Ingestion</b>	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). Due to product form and application, ingestion is considered unlikely.
<b>First aid facilities</b>	No information provided.

#### **4.2 Most important symptoms and effects, both acute and delayed**

Contact with dust / powder may result in mechanical irritation.

#### **4.3 Immediate medical attention and special treatment needed**

Treat symptomatically.

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## **5. FIREFIGHTING 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. May evolve toxic gases if strongly heated. Not expected to evolve hazardous decomposition products.

### **5.3 Advice for firefighters**

No fire or explosion hazard exists.

### **5.4 Hazchem code**

None allocated

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## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

### **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.

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## **7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.

### **7.3 Specific end use(s)**

No information provided.

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**8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**

**8.1 Control parameters**

**Exposure standards**

Substance	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Aluminium oxide (a)	SWA (AUS)	--	10	--	--
Calcium oxide	SWA (AUS)	--	2	--	--
Iron oxide fume (Fe <sub>2</sub> O <sub>3</sub> ) (as Fe)	SWA (AUS)	--	5	--	--
Quartz (respirable dust)	SWA (AUS)	--	0.1	--	--

**Biological limits**

No biological limit values have been entered for this product.

**8.2 Exposure controls**

**Engineering Controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Wet where possible. Maintain dust levels below the recommended exposure standard.

**PPE**

- Eye/Face** When using large quantities or where heavy contamination is likely, wear dust-proof goggles.
- Hand** When using large quantities or where heavy contamination is likely, wear PVC or rubber or cotton gloves.
- Body** No PPE specified.
- Respiratory** Where an inhalation risk exists, wear a Class P2 (Particulate) respirator.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

- Appearance** WHITE TO AMBER COLOURED SOLID
- Odour** ODOURLESS
- Odour Threshold** NOT AVAILABLE
- Flammability** NON FLAMMABLE
- Flash Point** NOT RELEVANT
- Boiling Point** NOT AVAILABLE
- Melting Point** 1713°C
- Evaporation Rate** NOT AVAILABLE
- pH** NOT AVAILABLE
- Specific Gravity** 2.2
- Solubility (water)** INSOLUBLE
- Vapour Density** NOT AVAILABLE
- Vapour Pressure** NOT AVAILABLE
- Upper Explosion Limit** NOT RELEVANT
- Lower Explosion Limit** NOT RELEVANT
- Partition Coefficient** NOT AVAILABLE
- Autoignition Temperature** NOT AVAILABLE
- Decomposition Temperature** NOT AVAILABLE
- Viscosity** NOT AVAILABLE
- Explosive Properties** NOT AVAILABLE
- Oxidising Properties** NOT AVAILABLE

**9.2 Other information**

**Density** 1500 kg/m<sup>3</sup>

Product name **QUARTZ**

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## 10. STABILITY AND REACTIVITY

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### 10.1 Reactivity

Carefully review all information in sections 10.2 to 10.6.

### 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 contact with incompatible substances.

### 10.5 Incompatible materials

Incompatible with strong acids (e.g. hydrofluoric acid). Also incompatible (possible violently) with oxygen difluoride, vinyl acetate and magnesium.

### 10.6 Hazardous decomposition products

Not expected to evolve hazardous decomposition products.

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## 11. TOXICOLOGICAL INFORMATION

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### 11.1 Information on toxicological effects

<b>Acute toxicity</b>	Based on available data, the classification criteria are not met.
<b>Skin</b>	Contact may result in mechanical irritation, redness, rash and dermatitis.
<b>Eye</b>	Contact may result in mechanical irritation, lacrimation and redness.
<b>Mutagenicity</b>	Insufficient data available to classify as a mutagen.
<b>Carcinogenicity</b>	Not classified as a carcinogen. Crystalline silica is classified as carcinogenic to humans (IARC Group 1). However, adverse health effects are not anticipated given the non respirable nature of the silica quartz in this product (as supplied).
<b>Reproductive</b>	Insufficient data available to classify as a reproductive toxin.
<b>STOT - single exposure</b>	Not classified as causing organ damage from single exposure. However, over exposure may result in irritation of the nose and throat, with coughing.
<b>STOT - repeated exposure</b>	Not classified as causing organ damage from repeated exposure. Adverse health effects, usually associated with long term exposure to high crystalline silica dust levels are not anticipated due to the product form. This product may only present a hazard if respirable quartz dust is generated. Chronic exposure to dust may cause lung fibrosis (silicosis).
<b>Aspiration</b>	This product is a solid and aspiration hazards are not expected to occur.
<b>Sensitisation</b>	Not classified as causing skin or respiratory sensitisation.

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**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

No information provided.

**12.2 Persistence and degradability**

No information provided.

**12.3 Bioaccumulative potential**

No information provided.

**12.4 Mobility in soil**

No information provided.

**12.5 Results of PBT and vPvB assessment**

No information provided.

**12.6 Other adverse effects**

The main component/s of this product are not anticipated to cause any adverse effects to plants or animals.

**13. DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

**Waste disposal** Reuse where possible. No special precautions are normally required when handling this product.  
**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)
<b>14.1 UN number</b>	None Allocated	None Allocated	None Allocated
<b>14.2 UN proper shipping name</b>	None Allocated	None Allocated	None Allocated
<b>14.3 Transport hazard classes</b>			
<b>DG Class</b>	None Allocated	None Allocated	None Allocated
<b>Subsidiary risk(s)</b>	None Allocated	None Allocated	None Allocated
<b>14.4 Packing group</b>	None Allocated	None Allocated	None Allocated
<b>14.5 Environmental hazards</b>		None Allocated	
<b>14.6 Special precautions for user</b>			
<b>Hazchem Code</b>	None Allocated		

**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** None allocated  
**Risk phrases** None allocated  
**Safety phrases** None allocated

**WHS regulatory information**

Ingredient name	CAS number	Regulation	Details
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**Product name**            **QUARTZ**

Ingredient name	CAS number	Regulation	Details
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	Restricted Hazardous Chemicals	Free silica (crystalline silicon dioxide). For abrasive blasting >1%.
		Schedule 14 - Health Monitoring	Crystalline silica

**Inventory listing(s)**        **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**  
All components are listed on AICS, or are exempt.

**15.2 Chemical safety assessment**

No information provided.

**16. OTHER INFORMATION**

**Additional information**    **SILICA - MEDICAL CONSIDERATIONS:** Medical testing for those with frequent or potentially high exposure to silica (half the Exposure Standard or more) is recommended before beginning work and at regular intervals thereafter. This should include; Lung function tests - chest x-rays every 1-3 years. If abnormal chest x-ray develops, skin test for tuberculosis should be done. Any evaluation should include a careful history of past and present symptoms with an exam. Medical tests that look for damage already done are not a substitute for controlling exposure.

**EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES:** Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

**IARC GROUP 1 - CONFIRMED HUMAN CARCINOGEN.** This product contains an ingredient for which there is sufficient evidence to have been classified by the International Agency for Research into Cancer as a human carcinogen. The use of products known to be human carcinogens should be strictly monitored and controlled.

**HEALTH EFFECTS FROM EXPOSURE:**  
It should be noted that the effects from exposure to this product will depend on several factors including: 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 ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**  
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as 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.

<b>Abbreviations</b>	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/m <sup>3</sup>	Milligrams per Cubic Metre

**Product name**

**QUARTZ**

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 ChemAlert report has been independently compiled by RMT's scientific department utilising the original Safety Data Sheet ('SDS') for the product provided to RMT by the manufacturer. The information is based on the latest chemical and toxicological research 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. It is an independent collation by RMT of information obtained from the original SDS for this product. Its content has not been authorised or verified by the manufacturer / distributor of the chemical to which it relates.

This ChemAlert report does not constitute the manufacturer's original SDS and is not intended to be a replacement for same. It is provided to subscribers of ChemAlert as a reference tool only, is not all-inclusive and does not represent any guarantee as to the properties of the product. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this ChemAlert report, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this ChemAlert report.

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**End of Report**