

## 1. Product and Company Description

Product Name: QSTONE  
 Product Use: Quartz Surfacing  
 Supplier: JH Wilberforce Pty Ltd  
 100 Mulgul Road Malaga, WA 6065 Australia  
 P: +618 9340 6222 F: +61 8 9340 6262 E: info@jhwillberforce.com.au  
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## 2. Hazards Identification

The product as such is not hazardous. The hazards of this product are associated mainly with its processing.

Operations such as sawing, routing, drilling and sanding can generate dust.

Dust generated during handling of Quartz Surfacing Products can contain particles of crystalline silica B(Quartz).

Overexposure to airborne quartz can cause silicosis.

- Emergency Overview:

Information Pertaining to Particular Dangers for Man and Environment:

Classification: This preparation is not classified as hazardous according to the latest adaptation of European Union Directives 67/548/EEC and 1995/45/EC.

- Potential Health Effects:

Acute Eye: Product in finished form does not present a health hazard via this route of entry. Dusts and flying particles generated during cutting, grinding and forming may cause irritation and injury.

Acute Skin: Dusts generated from this product may cause skin irritation.

Acute Inhalation: Dusts from product may cause irritation to respiratory tract, nose, throat and lungs.

Acute ingestion: Not considered a potential health hazard via this route of entry. This product may cause gastrointestinal irritation if dusts are swallowed.

Chronic Exposure: The adverse health effects from crystalline silica exposure - silicosis, cancer, scleroderma, tuberculosis, and nephrotoxicity - are chronic effects.

Aggravation of Pre-existing

Conditions: Not Determined.

- Safety phrases:

Do not breathe dust.

Avoid contact with skin.

Use only in well ventilated areas.



## 3. Chemical Composition

1. Component	2. CAS#	3. % Composition
4. Crystalline silica (quartz) and other natural stone	5. 14808-60-7	6. 85-90
7. Cristobalite	8. 14464-46-1	9. 50
10. Polymeric resin	11. N/A	12. 5-13
13. Additives	14. N/A	15. 0-6
16. Resins and trace minerals including Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , CaO, MgO, Na <sub>2</sub> O, K <sub>2</sub> O, ...	17. N/A	18. Balance

## 4. First Aid Measures



Eye Exposure:	Flush eyes immediately with copious amounts of water for a minimum of 15 minutes. Seek immediate medical attention if adverse effect occurs.
Skin Exposure:	Wash skin with soap and plenty of water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Seek medical attention if adverse effect occurs.
Inhalation:	Remove person to fresh air. If breathing is difficult, or has stopped, administer artificial respiration (mouth to mouth) or oxygen as indicated. Call a physician.
Ingestion:	If the material is swallowed, seek medical attention or advice.

## 5. Fire Fighting Measures

The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing Media

Water, Dry Chemical, CO<sub>2</sub>, Foam.

Fire Fighting Instructions

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus.

## 6. Accidental Release Measures

Cleanup and Disposal of Spill: Solid slabs can simply be gathered as necessary. If large amounts of dust or wastes are created by cutting process, vacuum or sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust. Wear sufficient respiratory protection and protective clothing where necessary. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or local Waste Management Authority. Dispose of waste in accordance with local, state and federal regulations.

## 7. Handling and Storage

Avoid breathing dust and dust formation. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Good industrial hygiene practices should be followed when handling this material. No specific conditions are given for safe storage, except that storage should be in a closed and covered space. Avoid strong impacts that might break the material.

Product is heavy and breakable; handle with care to avoid injury and prevent damage.

## 8. Exposure Controls / Personal Protection

Components with workplace control parameters:

Components	CAS-No.	Type / Form of exposure	Control parameters	Update	Basis
Quartz	14808-60-7	TWA / Respirable	0,3 mg/m <sup>3</sup>	2005	EH40WEL

The mandatory limit for silica dust exposure in Australia is 0.1mg/m<sup>3</sup> averaged over an eight hour day, although the ACGIH have recommended this be limited to 0,025mg/m<sup>3</sup>.

Engineering Controls: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Respiratory Protection: No RPE can prevent all silica dust from being breathed in and should be used in combination with other controls. RPE cannot protect you if it doesn't fit properly. Employers should have workers fit tested and trained in their use and maintenance. This is even more important if you have facial hair. It is important to choose the right RPE for the job; use the AS/NZS 1715:2009 standards.

Eye/Face Protection:	During cutting, grinding or sanding operations safety glasses with side shields or goggles should be worn.	
Skin Protection:	During cutting, grinding or sanding operations use body protection appropriate for task including work gloves if handling sharp or rough edges and steel-toed shoes if lifting product.	
Prevention:	P260 - Do not breathe dust generated in the cutting, grinding and polishing processes. P264 - Wash face and hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P284 - Wear respiratory protection for particles (P3).	
First Aid Measures:	P314 - Get medical advice/attention if you feel unwell. P501 - Dispose of remains in accordance with local regulation. R20 - Harmful by inhalation R48 - Danger of serious damage to health by prolonged exposure.	
Hygiene:	S22 - Do not breathe the dust. S38 - Use personal protective equipment P3. Classification according to directive 1999/45/EC	

## 9. Physical and Chemical Properties

1. Physical Appearance:	2. Multi-colored engineered stone
3. Odor:	4. Odorless
5. pH:	6. NA
7. Specific Gravity/Density:	8. 2.44
9. Water Solubility:	10. Insoluble
11. Melting Point:	12. NA
13. Freezing Point	14. NA
15. Boiling Point:	16. NA
17. Vapor Pressure:	18. NA
19. Percent Volatiles by Volume:	20. NA
21. Evaporation Rate:	22. NA
23. Viscosity:	24. ND
25. Flash Point:	26. 450°C.
27. Explosion Limits:	28. Lower: ND / Upper: ND
29. Auto ignition Temp:	30. At temperatures >450°C, this product will auto ignite

## 10. Stability and Reactivity

Chemical Stability:	Stable at normal temperatures and storage conditions.
Conditions to Avoid:	None
Materials / Chemicals to Be Avoided:	This product is incompatible with hydrofluoric acid. Silica will dissolve in hydrofluoric acid and produce the corrosive gas silicon tetrafluoride.
Hazardous Decomposition Products:	Upon decomposition, various hydrocarbons, carbon dioxide, carbon monoxide fumes, and water may be released.
Hazardous Polymerization:	Will not occur.

## 11. Toxicological Information

### Acute Effects:

Crystalline Silica: Inhalation (human) LCLo: 0.3mg/m<sup>3</sup>/10Y  
 Inhalation (human) TCLo: 16mppcf/8H/17,9Y  
 Intermittent; focal fibrosis, (pneumoconiosis), cough, dysphonia.  
 Inhalation (rat) TCLo: 50mg/m<sup>3</sup>/6H/71W  
 Intermittent; liver – tumors Oral LD50 RAT: 500 mg/kg

### Chronic Effects:

Crystalline Silica: Health effects of c-silica and a-silica in people are found in workers exposed for long periods of time (typically ≥10 years) or with extremely heavy exposure over a short period of time (acute silicosis). There is no evidence that breathing small amounts of silica compounds found in the environment causes any health effects in humans. No health effects are shown to occur in humans from eating food or drinking water contaminated with c-silica or a-silica or from exposure of the skin to these compounds.

Silicosis: Caused by the inhalation and retention of respirable crystalline silica dust on long-term occupational exposure.

Carcinogenicity: The International Agency for Research on Cancer (IARC) concluded that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)".

### Aggravation of

Pre-existing Conditions: Inhalation may increase the progression of tuberculosis; susceptibility is apparently not increased. Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury.

Mutagenicity: No Data

Reproductive Effects: No Data

Developmental Effects: No Data

## 12. Ecological Information

Toxicity is expected to be low based on insolubility in water.

Environmental Fate: Not Determined

Environmental Toxicity: Not Determined

## 13. Disposal Considerations

Waste Disposal Method: Preferred options for disposal are (1) recycling, (2) incineration with energy recovery, and (3) landfill. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose in accordance with federal, state and local requirements.

## 14. Transportation Information

Not classified as dangerous.

1. Proper Shipping Name	2. Not Regulated
3. Name Hazard Class	4. Not Regulated
5. ID Number	6. Not Regulated
7. Packing Group	8. Not Regulated

## 15. Regulatory Information

Federal Regulations:

SARA Title III Hazard Classes:

1. Fire Hazard:	2. No
3. Reactive Hazard:	4. No
5. Release of Pressure	6. No
7. Acute Health Hazard:	8. No
9. Chronic Health Hazard	10. Yes

TSCA: All components of this product are on the TSCA inventory or are exempt from TSCA Inventory requirements

U.S. State Regulations: California Prop 65 List: Crystalline silica (quartz) is classified as a substance known to the state of California to be a carcinogen.

Other Regulations:

EU Marking and Labeling

Symbol:	None
Risk Phrases:	None
Safety Phrases:	None

Inventory Information: The substances in this preparation have been checked against the European Inventory of Existing Commercial Substances (EINECS), the European List of Notified Chemical Substances (ELINCS), and the No Longer Polymer (NLP) list. Substances not identified on these inventories are exempt.

## 16. Other Information

National Fire Protection Association NFPA(R) and Hazardous Materials Identification System (HMIS) Hazard Ratings:

Health Hazard:	1
Flammability:	0
Reactivity:	0

Key Legend Information:

11. N/A	12. Not Applicable
13. ND	14. Not Determined
15. ACGIH	16. American Conference of Governmental Industrial Hygienists
17. OSHA	18. Occupational Safety and Health Administration
19. TLV	20. Threshold Limit Value
21. IDLH	22. Immediately Dangerous to Life and Health
23. PEL	24. Permissible Exposure Limit
25. TWA	26. Time Weighted Average
27. STEL	28. Short Term Exposure Limit
29. NTP	30. National Toxicology Program
31. IARC	32. International Agency for Research on Cancer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.