QUANTUMSIX+
PORCELAIN SHEETS

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name **QUANTUMSIX+**

Synonyms QUANTUM SIX +

1.2 Uses and uses advised against

Uses CLADDING ● DECORATIVE STONE ● FLOORING ● TILE ● WALL TILE

1.3 Details of the supplier of the product

Supplier name **WK MARBLE & GRANITE**

Address 129 Fairford Road, Padstow, NSW, 2211, AUSTRALIA

Telephone (02) 9772 9888

Fax (02) 9772 9889

Website https://www.wk.com.au

1.4 Emergency telephone numbers

Emergency 13 11 26

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 1
Specific Target Organ Toxicity (Repeated Exposure): Category 1

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.
H372 Causes 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.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response statements

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

Storage statements

P405 Store locked up.

Disposal statements

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

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 or machined may cause mechanical irritation and may contain crystalline silica, some of which may be respirable. Repeated exposure to respirable crystalline silica dust may cause lung fibrosis (silicosis). NOTE: The classifications provided are reflective of the product once dust is generated.

The E-glass fibre backing is not respirable, but may cause;
- Formation of non-respirable, but inhalable particles (can be breathed into the upper respiratory tract) in processes where dust is formed.
- Temporary irritation (itching) of a purely mechanical nature, affecting the skin, eyes and upper respiratory tract.
- Allergies in very rare cases.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	238-878-4	15 to 25%
CALCIUM OXIDE(S)	-	-	<2%
ZIRCONIUM DIOXIDE	1314-23-4	215-227-2	<2%
GLASS, OXIDE	65997-17-3	266-046-0	<1%
TITANIUM DIOXIDE	13463-67-7	236-675-5	<1%
SILICON DIOXIDE	99439-28-8	685-393-2	67 to 70%
ALUMINIUM OXIDE(S)	-	-	18 to 20%
POTASSIUM OXIDE(S)	-	-	<5%
SODIUM OXIDE(S)	-	-	<5%
IRON OXIDE(S)	-	-	<1%
MAGNESIUM OXIDE(S)	-	-	<1%

Ingredient Notes Respirable crystalline silica may be generated when product is cut, grinded or polished.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye (Dust exposure) Flush gently with running water, irrigating under eyelids. Seek medical attention if irritation develops.

Inhalation (Dust exposure) If inhaled remove from contaminated area. Apply artificial respiration if not breathing.

Skin (Dust exposure) Gently flush affected areas with water. Seek medical attention if irritation develops.

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

First aid facilities Eye wash facilities and safety shower should be available, particularly when dust is generated.

4.2 Most important symptoms and effects, both acute and delayed

This material may only present a hazard if cut, sanded or drilled with dust generation. Chronic exposure to dust may result in lung fibrosis (silicosis).

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. May evolve toxic gases if strongly heated.

5.3 Advice for firefighters
No fire or explosion hazard exists.

5.4 Hazchem code
None allocated.

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
Solid slabs can be collected for disposal or re-use. If dust is generated during the fabrication process, use a high efficiency particulate air (HEPA) filter vacuum system or dampen the dusts, and sweep wet material for disposal. Do not sweep dry material. Avoid generating dust. Dust is best cleaned up using wet methods or an approved industrial vacuum device.

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
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. Product should not be processed using dry cutting, wet methods only should be used.

7.2 Conditions for safe storage, including any incompatibilities
Ensure material is adequately labelled and protected from physical damage. Avoid generating dust.

7.3 Specific end uses
No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Exposure standards *refer local state regulators

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Calcium oxide	SWA [AUS]	--	2	--	--
Iron oxide fume (Fe2O3) (as Fe)	SWA [AUS]	--	5	--	--
Non-respirable fibres, inspirable dust	SWA [AUS]	--	2	--	--
Quartz (respirable dust)	SWA [AUS]	--	0.05	--	--
Quartz (respirable dust) (Precautionary advice)	WorkSafe VIC	--	0.02	--	--
Synthetic mineral fibres, respirable fibres	SWA [AUS]	--	0.5 f/ml	--	--
Titanium dioxide (a)	SWA [AUS]	--	10	--	--
Titanium dioxide (inhalable)	SWA [Proposed]	--	1	--	--
Zirconium compounds (as Zr)	SWA [AUS]	--	5	--	10
Zirconium compounds (as Zr)	SWA [Proposed]	--	5	--	--

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 cut, polish, sand, grind or drill only. Maintain dust levels below the recommended exposure standard.

PPE

Eye / Face	If cutting or sanding with potential for dust generation, wear dust-proof goggles.
Hands	Wear leather or cotton gloves.
Body	Not required under normal conditions of use.
Respiratory	All efforts should be made to avoid uncontrolled dry cutting, sanding, polishing, grinding or drilling, but if alterations are unavoidable use a half face (negative pressure) with minimum P1 or P2 particulate respirator & tools that have water suppression & on tool dust extraction with H class rating. Consultation with relevant State Worksafe offices for further details is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	COLOURED SOLID STONE
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	> 1300°C
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Relative density	2.4 to 2.5
Solubility (water)	INSOLUBLE
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 EXPLOSIVE
Oxidising properties	NON OXIDISING
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid dust formation.

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 toxicity. Ingestion is considered unlikely due to product form.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
TITANIUM DIOXIDE	5000 mg/kg (rat)	--	3.43 - 6.82 mg/L air (rat)

Skin Mechanical irritant. Prolonged or repeated contact may result in mild irritation due to mechanical action.

Eye Mechanical irritant. Due to product form and nature of use, the potential for exposure is reduced. Product may only present a hazard if material is cut, drilled or sanded with dust generation, which may result in mechanical irritation.

Sensitisation Not classified as causing skin or respiratory sensitisation.

Mutagenicity Not classified as a mutagen.

Carcinogenicity 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). Crystalline silica 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. Special-purpose fibres such as E-glass are classified as possibly carcinogenic to humans (IARC Group 2B). However, these are reported to be non-respirable by the original manufacturer.

Reproductive Not classified as a reproductive toxin.

STOT - single exposure Dust can be generated during cutting of the product. Dusts are mechanical irritants that may cause throat irritation.

STOT - repeated exposure This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. However, dust created when the product is cut, grinded and machined may contain respirable crystalline silica (particles small enough to go into deep parts of the lung when breathed in). Repeated overexposure to crystalline silica for extended periods may result in silicosis.

Aspiration Not applicable for solids.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

The substance is inert and there is no evidence of significant toxicity.

12.2 Persistence and degradability

Being inorganic, the substance will not biodegrade.

12.3 Bioaccumulative potential

The substance is inert and will not be absorbed and accumulate in tissues.

12.4 Mobility in soil

A low mobility would be expected in a landfill situation.

12.5 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. Dispose of in accordance with local regulations.

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

No information provided.

14.6 Special precautions for user

Hazchem code 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 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.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, 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 SDS.

Prepared by

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmtglobal.com
Web: www.rmtglobal.com

[End of SDS]