

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name TERRACOTTA ROOF TILES AND ACCESSORIES
Synonyms DESIGNER CERAMIC ROOF TILES AND ACCESSORIES

1.2 Uses and uses advised against

Uses BUILDING APPLICATIONS • ROOFING • ROOFING MATERIALS

1.3 Details of the supplier of the product

Supplier name MONTORO ROOFING PTY LTD UNDER LICENCE FROM LUTUM
Address 305/350 George Street, Sydney, NSW, 2000, AUSTRALIA
Telephone 1300 134 002
Email info@lutum.com.au
Website <http://www.lutum.com.au>

1.4 Emergency telephone numbers

Emergency 1300 134 002

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

2.2 GHS 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	10 to 70%
MANGANESE DIOXIDE	1313-13-9	215-202-6	1 to 2%
NON HAZARDOUS CLAY MINERALS	-	-	10 to 40%

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. Do not induce vomiting. If symptoms persist, seek medical attention.

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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 product may present a hazard if cut or drilled with dust generation. CAUTION: Repeated exposure to dust may cause 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

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.

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.

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

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Manganese, dust & compounds (as Mn)	SWA [AUS]	--	1	--	--
Manganese, fume (as Mn)	SWA [AUS]	--	1	--	3
Quartz (respirable dust)	SWA [AUS]	--	0.05	--	--

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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	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	If cutting or sanding with potential for dust generation, wear, at a minimum, a Class P2 (Particulate) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	SOLID
Odour	SLIGHT ODOUR
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Relative density	NOT AVAILABLE
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 AVAILABLE
Oxidising properties	NOT AVAILABLE
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 heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

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

10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

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
MANGANESE DIOXIDE	> 3478 mg/kg (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	Adverse health effects, usually associated with long term exposure to high respirable crystalline silica quartz dust levels are not anticipated due to product form. This product may only present a hazard if tiles are cut or drilled causing dust generation. Respirable crystalline silica quartz is classified as carcinogenic to humans (IARC Group 1).
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	Adverse health effects, usually associated with long term exposure to high respirable crystalline silica quartz dust levels are not anticipated due to the product form. This product may present a hazard if cut or drilled with dust generation. CAUTION: Repeated exposure to dust may cause lung fibrosis (silicosis). Some studies have shown that repeated exposure to manganese dioxide dust may cause damage to the lungs and central nervous system.
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

No information provided.

12.5 Other adverse effects

Boral concrete roof tiles (with and without coating) have been developed with reference to section 4.6 of AS 2049-2002, and tested to perform in accordance within the parameters of section 6 of AS4020-2018 when installed and used correctly. However, customers are advised to give consideration to potential impacts of atmospheric fall outs, water tank manufacturer guidelines and other external factors which may affect drinkability of rainwater or the performance of the tiles more generally.

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

PRODUCT NAME TERRACOTTA ROOF TILES AND ACCESSORIES**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.

PRODUCT NAME TERRACOTTA ROOF TILES AND ACCESSORIES**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/m ³	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.

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