SAFETY DATA SHEET
Concrete Roof Tiles & Roof Tile Accessories

BG No: 02020-4 Issue Date July 2020 page 1 of 5	Product Name CONCRETE ROOF TILES & ROOF TILE ACCESSORIES	Emergency Tel: 000 Info: Technical Manager (03) 9646 5520 Poisons Information 13 11 26	Issued by Alice Roof Tiles (a business unit of Barro Group Pty Ltd) Victoria, Australia

1. IDENTIFICATION OF MATERIAL & SUPPLIER DETAILS

Company Name:	Barro Group Pty Limited trading as ALICE ROOF TILES
Address:	191 Drummond St, Carlton, Victoria Australia
Tel/Fax:	Ph: (03) 8656 3900 Fax: (03) 9663 2555
Email	barro@barro.com.au
Product Name:	Concrete Roof Tiles and Roof Tile Accessories
Other Names:	Alice Roof Tiles
Use(s):	building applications, roofing, roofing materials

2. HAZARDS IDENTIFICATION – classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA
NOT CLASSIFIED AS DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE (Australian Dangerous Goods Code)
NO SIGNAL WORD, PICTOGRAMS, HAZARD OR PRECAUTIONARY STATEMENTS HAVE BEEN ALLOCATED

Proper Shipping Name:	None Allocated
UN Number:	None Allocated
DG Class:	None Allocated
Subsidiary Risks(s)	None Allocated
Packing Group:	None Allocated
Hazchem Code:	None Allocated
Poisons Schedule:	Not Scheduled
Product Use:	Roofing material for buildings.

3. INGREDIENTS – composition / information on ingredients

Chemical Entity	Proportion:
Ingredients usually present:	
Quartz/Quartzitic Sand	> 60% Crystalline silica (quartz) Formula S_i 0.2mg/m^3 (*CAS–14808-60-7)(EC238-878-4)
Hydrated Portland cement	< 30% Formula not available (*CAS not available)
Pigment(s)	< 10% Formula not available (*CAS not available)
Fatty Acid Soap	< 1%
Acrylic Copolymer	< 1% not available (*CAS not available)
Water	< 10% Low H_2O (less than 10%) (*CAS 7732-18-5) (EC231-791-2)
Distillate	< 1%
Ingredients sometimes present:	
Fly Ash/Pozzolans	Low (less than 10%)
Ground granulated blast furnace slag	Low (less than 10%)
	NOTE: Chromium VI is a trace impurity in Portland Cement. Portland cement, sand, crushed stone, gravel, blast furnace slag and fly ash may contain crystalline silica (quartz). Depending on the source of the material for the above ingredients, the crystalline silica content of the final product can vary from product to product.

[*CAS – Chemical Abstract Service Number – used to identify chemical compounds.]

4. FIRST AID MEASURES

Swallowed/ingestion:	For advice, contact Poison Information Centre on 13 11 26 (Aust wide) or a doctor (at once). Wash out mouth with cold clean water. DO NOT induce vomiting. Then drink plenty of water. Due to product form and application, ingestion is considered unlikely.
Eye:	(Dust exposure) If in eyes, gently wash with flowing clean cold water, preferably sterile, irrigating under eyelids. Seek medical attention if irritation develops.
Skin:	(Dust exposure) Gently flush affected areas with water. If skin or hair contact, remove contaminated clothing and wash skin and hair with tepid running water and non-abrasive soap if necessary, and remove source of contamination. Clean abrasions and cuts and apply sterile dressing. If irritation develops and persists, seek medical attention.

Inhaled	(Dust exposure) If inhaled, remove source of contamination and move victim to fresh air. Apply artificial respiration if not breathing. If irritation continues, seek medical advice.
Advice to Doctor	Treat symptomatically

Treat symptomatically - immediately seek medical attention and special treatment needed

5. FIRE FIGHTING MEASURES – flammability / fire-explosion hazard

Fire Hazards:	Not flammable or combustible; no fire or explosion hazard exists; does not cause dust explosions. May evolve toxic gases if strongly heated. Extinguishing – prevent contamination of drains and waterways. Hazchem Code-none allocated. Advise Firefighters no fire or explosion hazard exists

6. ACCIDENTAL RELEASE MEASURES – STORAGE & HANDLING

Spillage and Disposal:	If spilt, collect and reuse where possible. Dispose of as a solid fill trade waste at a registered site in accordance with local authority regulations. Clear work areas by hosing if approved waste water collection systems are available (prevent product from entering drains and waterways). Dust is best cleaned up by vacuum device to avoid generating airborne dust – wetting before sweeping up dust may assist in dust control.
Storage Precautions:	No special storage or transportation requirements but store in cool, dry, well ventilated area, removed from oxidising agents, acids and foodstuffs. Ensure containers are adequately labeled and protected from physical damage
Transport:	Not classified as a Dangerous Good.
Handling:	Before using read product label. Use of safe work practices are recommended to avoid eye or skin contact or inhalation. Prevent all contact with the skin and maintain personal hygiene standards – always wash hands before and after eating, drinking, smoking or using the toilet. Do not eat, drink or smoke in contaminated areas
Proper Shipping Name	None allocated

7. EXPOSURE CONTROL & PERSONAL PROTECTION

Exposure Standards:	Ingredient: Silica, Crystalline Quartz; Reference Safe Work Australia TWA SWA 0.1mg/m^3
Biological Limits:	No biological limit allocated
Engineering:	Exposure control - avoid inhalation; use well ventilated area. Where inhalation risk exists, mechanical extraction is recommended; wet where possible; maintain dust levels below the recommended exposure standard.
PPE:	Wear cotton or leather gloves; if cutting or sanding with potential for dust generation, wear dust proof safety goggles and a Class P1 (Particulate) respirator; wear waterproof steel-capped safety boots; wear hard hat
Clothing:	Full clothing covering sections of body likely to come in contact with concrete tiles including use of sleeves, long trousers, cap/hat etc.

8. PHYSICAL and CHEMICAL PROPERTIES

Appearance	Solid - a concrete roof tile is a tile with the exposed top surface coated with colour and acrylic resin		
Odour	Slight odour	Partition coefficient	Not available
pH	Not available	Solubility (water)	Insoluble
Vapour Pressure	Not available	Specific gravity	Not available
Vapour Density	Not available	% Volatiles	Not available
Boiling point	Not available	Flammability	Non flammable
Melting point	Not available	Flash point	Not relevant
Evaporation rate	Not available	Upper explosion limit	Not relevant
Autoignition temperature	Not available	Lower explosion limit	Not relevant
Decomposition temperature	Not available	Viscosity	Not available
Explosive properties	Not available	Oxidising properties	Not available
Odour threshold	Not available		

9. STABILITY and REACTIVITY

Materials to avoid	Incompatible with oxidising agents and acids (e.g. nitric acid)
Hazardous Decomposition Products	May evolve toxic gases if heated to decomposition

Reactivity	Chemical stability – stable under recommended storage conditions Possibility of hazardous reactions - polymerization is not expected to occur Avoid heat, sparks, open flames and other ignition sources Hazardous decomposition products – may evolve toxic gases if heat to decomposition

10. TOXICOLOGICAL INFORMATION - Health Effects

Acute toxicity	Product is expected to be low toxicity; ingestion considered unlikely due to product form
Health Hazard Summary	Low toxicity – irritant. Under normal conditions of use this product is not anticipated to present a hazard unless product is cut, ground, drilled or sanded with the generation of irritating dust. Work safely to avoid dust generation/inhalation. Chronic exposure to crystalline silica may increase nasal and respiratory secretions and coughing. Repeated and prolonged exposure to high levels may result in silicosis (lung fibrosis.
Swallowed/ingestion:	Under normal conditions of use, unlikely to be swallowed due to product form.
Eye:	Due to product form and nature of use, potential for exposure is reduced. A hazard may be presented if material is cut, ground or sanded with dust generation which may result in mechanical irritation; eye watering and redness.
Skin:	Low irritant; prolonged or repeated exposure may result in mild irritation due to mechanical action. Chronic. Repeated skin contact with dust may result in chronic skin irritation and dermatitis
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Mutagenicity	Not classified as a mutagen
Inhaled:	Exposure considered unlikely and inhalation hazard is not anticipated unless cut, drilled or sanded with dust generation which may result in irritation of the nose and throat. Crystalline silica is classified as carcinogenic to humans (International Agency for Research on Cancer - IARC Group 1).
Other information	Inhalation of airborne particles from other sources in the work environment, including those from cigarette smoke, may cause the risk of respiratory diseases. It is recommended that all storage and work areas should be smoke-free zones and that other airborne contaminants should be kept to a minimum.
Carcinogenicity	Adverse health effects, usually associated with long term exposure to high crystalline silica dust levels are not anticipated due to product form. Product may only present a hazard if cut or drilled with dust generation Crystalline silica is classified as carcinogenic to humans (International Agency for Research on Cancer - 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 crystalline silica dust levels are not anticipated due to product form; product may present a hazard if cut or drilled with dust generation; chronic exposure to dust may cause lung fibrosis (silicosis)
Toxicity Data	Quartz (Silica Crystalline) (14808-60-7) LCLo (inhalation): 300 ug/m^3 / 10 years (human) LDLo (intratracheal): 200mg/kg (rat) LDLo (intravenous): 20mg/kg (dog) TCLo (inhalation): 16 000 000 particles/ft3/8hours/17.9 years (human-fibrosis)

11. ECOLOGICAL INFORMATION

Ecotoxicity:	Limited data available, but product unlikely to pose ecology risks
Mobility	A low mobility would be expected in a landfill situation
Persistence & Degradability	Product is persistent and would have a low degradability. Ensure appropriate measures to prevent product from entering the environment e.g. prevent from entering waterways, drains or sewers
Bioaccumulative potential	no information provided
Mobility in soil	no information provided
Other adverse effects	main components of product not anticipated to cause any adverse effect to plants or animals

12. DISPOSAL CONSIDERATIONS

Waste Disposal	Reuse where possible. Dispose of as a solid fill trade waste at a registered site in accordance with relevant local legislation and regulations

13. TRANSPORT INFORMATION

Not classified as a dangerous good by the criteria of the ADG Code, IMDG or IATA
ADG Code - Land Transport), IMDG/IMO - Sea Transport), IATA/ICAO - Air Transport

Shipping Name:	None allocated	DG Class	None allocated
UN No.	None allocated	Hazchem Code	None allocated
Packing Group	None allocated	Subsidiary Risk(s)	None allocated

14. OTHER PROPERTIES

General:	The setting process starts within minutes of the cement and water being mixed.
Stability:	Stable.
Haz. Polymerization:	Will not occur
Autoignition Temp:	Not Applicable
Corrosiveness:	Not corrosive to aluminium

15. PRECAUTIONS FOR USE

Exposure Limits:	No minimum limits can be set as there is no specific standard for concrete tiles and accessories. Crystalline Silica: exposure standard to be observed 0.2mg/m^3 (time weighted average) as respirable dust. Dust NOS (not otherwise specified): 10mg/m ≥TWA as inspirable dust. (TWA – time weighted average). Effects from exposure will depend on factors including frequency and duration of use, quantity used, effectiveness of control measures, PPE use and application method. As it is impractical to prepare a report which would encompass all possible scenarios it is anticipated that users will apply risk assessment and appropriate controls.
PPE	The recommendation for use of Personal Protective Equipment is a guide only and users must consider all factors such as application method, working environment and engineering controls availability before selecting PPE.
Ventilation:	Work in well ventilated area and wear PPE when cutting tiles. State and Territory standards apply for different industries for Crystalline Silica – keep levels as low as practicable – personal exposure must not exceed the exposure standards
Engineering Controls:	No significant dust problem should occur during tile laying; cutting of tiles using power tools should be carried out in well ventilated area using wet processes (or using tools fitted with dust extraction). Avoid generating dust and inhaling dusts and minimize exposure to dust – respirable dust particles are invisible and may still be present when wet processes or dust extraction are used. Provide adequate ventilation and/or local dust extraction or water spray. Clean work areas regularly by wet sweeping and vacuuming (fitted with HEPA filters) in restricted areas or where there are strong winds. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Consider air powered or air supplied respirators where prolonged or repeated use is necessary.
Fragility	Tiles have a low load bearing capacity. When working on a tiled area, step only on that part of the tile directly supported by a batten

16. REGULATORY INFORMATION

Poison Schedule	No poison schedule number has been allocated (per Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)
Classifications	Safe Work Australia criteria based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals The classifications and phrases listed herein are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)]
AICS	All components are listed in the Australian Inventory of Chemical Substances (AICS), or are exempt
Risk & Safety Phrases	None allocated
Other	See Section 2 for more information

17. OTHER INFORMATION

Company Structure: Barro Group Pty Limited (ACN 005 105 724) provides this Safety Data Sheet ("SDS") for itself and its subsidiaries and trading divisions ("Barro Group").

Disclaimer: Barro Group believe that the information contained in this SDS is accurate to the best of our knowledge and is given in good faith, but no warranty expressed or implied is made. The suggested procedures are not necessarily all-inclusive

or fully adequate in every circumstance. Users are advised to make their own independent determination of suitability and completeness of information at their own risk, in relation to the particular purposes and specific circumstances. No responsibility is accepted by us for any loss or damage caused by any person acting or refraining from action as a result of any information contained in this SDS. Where the information provided herein disclosed a potential hazard or hazardous ingredient, adequate warning should be provided to employees and users and appropriate precautions taken. Since Barro Group cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application. Barro Group will not be responsible for damages of any nature resulting from the use or reliance upon this information. No expressed or implied warranties are given other than those implied mandatorily by Australian Legislation.
Enquiries concerning any of the technical matters raised in this SDS should be referred to the Technical Manager, Anacon Laboratory Services (details below).

SDS review: The information in this Safety Data Sheet (SDS) is issued in accordance with Australian guidelines. The SDS must not be altered, deleted or added to. Barro Group will not accept any responsibility for any changes made to its SDS by any other person or organization; where the information herein discloses a potential hazard or hazardous ingredient, adequate warning should be provided to employees and users and appropriate precautions taken.

18. OTHER INFORMATION

PERSONAL PROTECTIVE EQUIPMENT (PPE) GUIDELINES

The recommendation for PPE contained within this report is provided as a guide only. Factors such as method of application, work environment, product concentration and engineering controls available should be considered before selection of PPE

HEALTH EFFECTS FROM EXPOSURE

Effects of exposure to this product depend on several factors including frequency/duration of use, quantity used, control measures effectiveness, PPE used and how applied. Preparation of a report to encompass all possible scenarios is not practical so it is anticipated that users will assess the risks and apply appropriate controls.

CONTACT POINT

For further information, contact:

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EMERGENCY TEL: 000
POISONS INFORMATION TEL: 13 11 26

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