MATERIAL SAFETY DATA SHEET

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Report Number N-0319-882 - MSDS
Date Submitted 27/05/2019

Customer	**Architectural Stone and Wood Co.,** *Trading as Flexile*
Address	2/4 Anstey St, Albion 4010 QLD
Contact	Rupert Dowd
Purchase Order	-

Scope of Work	Provide MSDS for Dark Grey Sandstone
Identification	Dark Grey Sandstone
Further Description	-
Job Location	Melbourne

Disclaimers	Analytical results were obtained by a third-party laboratory: Ref: 190420-1

Approved by **Yashwin Mahadea**
Materials Engineer
Date 27/05/2019

Section 1 - Identification

Product name	Dark Grey Sandstone
Application of the Material	Internal / external cladding and flooring
Supplier details	Architectural Stone and Wood Co. Trading name: Flexile 2/4 Anstey St, Albion 4010 QLD
Emergency Contact details	Rupert Dowd 0408 127 174
Contact Number	0408 127 174

Section 2 - Hazards identification

Hazard Classification	This material is NOT classified as Hazardous according to Safe Work Australia or ADG Code. The marketed product poses no health hazard. However, dust derived from installation/demolishing processes* contains respirable crystalline silica (SiO_2). Hence, workers involved in installation processes and removing/demolishing the cladding are at risk of crystalline silica exposure and other respirable dusts. *Installation/demolition processes means cutting ,grinding, chipping, sanding, drilling, polishing etc.
Signal Word	WARNING
Hazards Statements [1]	(H350) Dust produced during installation/demolition processess may cause cancer (if inhaled) (H372) Dust produced during installation/demolition processess causes damage to ORGANS (lungs) through prolonged or repeated exposure if inhaled. (H335) May cause respiratory tract irritation.
Precautionary Statements [1]	
Prevention	P202 Do not handle until all safety precautions have been read and understood. P260+P261 Do not breathe dust generated during the insallation, removing/demolishing 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 dust particles Refer to section 7 for Handling and Storage and to Section 8 for dust exposure controls.
Response	P314 Get medical advice / attention if you feel unwell.
Disposal	P501 Dispose of contents and container in accordance with local, regional, national, international regulations.
Poisons Schedule (SUSMP)	None allocated.

Section 3 – Composition/Information on ingredients

Ingredient	CAS Number	Levels
Quartz (SiO_2)	14808-60-7	60.0 - 65.0%
Calcium Oxide	1305-7-8	15.0 – 20.0%
Aluminium Oxide	1344-28-1	5.0 – 10.0%
Magnesium Oxide	1309-48-4	< 5.0%
Carbon, organic	7440-440	7.0%

Section 4 – First aid measures

Material in its market form

Ingestion

Product in its marketed form is inert. If large amounts are swallowed, seek medical attention.

Skin and Eye contact with Product

Product in its marketed form is inert and should not present a risk.

Inhalation

Product in its marketed form is not inhalable

Dust produced during installation process:

Eye contact with dust

In case of contact, immediately flush eyes with plenty of clean/drinking water for at least 15 minutes. Get medical aid.

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin contact with dust

Wash affected area with soap and plenty of water. Seek medical attention if adverse effects occur.

Inhalation with dust

Remove person to fresh air. If breathing has stopped, administer artificial respiration and seek immediate medical attention.

Section 5 – Fire-fighting measures

Hazardous combustion products

In case if fire, hazardous decomposition products can occur; carbon dioxide, carbon monoxide, water and different hydrocarbons.

General hazard

Evacuate personnel downwind of fire to avoid inhalation of irritating and/or harmful gasses and smoke.

Extinguishing media

Foam, carbon dioxide, dry chemical or water. Prevent contamination of drains and waterways.

Fire fighting

Alert fire brigade and inform them of the hazard.

Wearing breathing apparatus and body protection are required for firefighting personnel.

Use firefighting procedures suitable for surrounding area.

Prevent contamination of drains and waterways.

Hazchem code

Not allocated

Section 6 – Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

Prevent product from entering drains and waterways.

Clean-up and Disposal of Spills – Major and Minor:

The product does NOT represent a risk of spillage.

Solid tiles can be simply gathered and disposed of as necessary.

However, if large amounts of dust or waste are created during the installation or removal process, use a HEPA vacuum system or dampen spilled material with water and sweep up wet material to avoid dust generation. DO NOT DRY SWEEP. Wear appropriate respiratory protection and personal protective equipment (See section 8).

Clean up all spills immediately. Dispose of waste in accordance with local, state and federal regulations.

Section 7 – Handling and storage

Handling

Use appropriate personal protective equipment as specified in Section 8.

Handle in a well-ventilated area.

Avoid breathing any generated dust in installation, removal/demolition processes as dust containing crystalline silica and other respirable dusts maybe generated.

Handle and use in a manner consistent with good industrial/manufacturing techniques and practices.

Wash thoroughly after handling and before eating/drinking, smoking or using restrooms.

Storage

Store in a closed, dry and well-ventilated area. Cartons should be adequately labelled, protected from physical damage via strong impacts that may cause the material to break.

Section 8 - Exposure controls / personal protection

Exposure limits

There is no provision for any exposure limits associated with the finished product or the installed product in the Australian HCIS system.

However, in the Installation, Removal/Demolition processes of the product, dust containing crystalline silica (SiO_2) and other minerals maybe generated. Australian Workplace Standards for Airborne Contaminants lists the following Permissible exposure limits, for repirable dusts, measured in mg/m^3.

8 hours, TWA:	Crystalline silica	0.1
	Calcium Oxide	2.0
	Aluminium Oxide	10.0

Employers should consult with a trained occupational safety and health professional to monitor the air in their workplace, in order to determine worker exposures to hazardous dusts.

Biological Limits

No biological limits have been entered for this product

Personal protective equipment

Eye protection

During Installation or removal processes use dust-proof safety glasses or goggles with side shields

Hand and Skin protection

Cotton or leather gloves. During the installation processes protective clothing should be worn to minimise cuts and/or skin exposure to dust. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Promptly remove any dusty clothing (which is a source of respirable silica) and launder safely, separately from other clothes, before reuse.

Respiratory protection

In the case of brief exposure to crystalline silica and other respirable dusts use properly fitted respiratory filter mask - for protection against respirable dusts. In case of intensive or longer exposure use self-contained respiratory protective device.

Section 9 – Physical and chemical properties

Physical State	Solid
Colour	Dark Grey (Sandstone)
Appearance	Individual tiles
Bulk density (g/cm^3)	1.59 -1.66
UN Class 4 Division 4.1	No, Not DG 4.1
UN Class 4 Division 4.2	No, Not DG 4.2
UN Class 4 Division 4.3	No, Not DG 4.3
UN Class 8	No, Not Class 8
Skin Corrosivity[4]	Non–corrosive for skin
pH (20% soln.)	9 – 10
Water Solubility (wt/wt%)	0.9
Other information	None known

[4] **Corrositex in-vitro protocol**

Section 10 –Stability and reactivity

Stability

Stable under normal conditions of use, storage and transport.

Chemical Stability

Stable at normal temperatures and storage conditions.

Conditions to avoid

Avoid strong impacts that may cause material to break.

Incompatible with hydrofluoric acid.

Hazardous decomposition products

May evolve carbon oxides and hydrocarbons when heated to decomposition.

Hazardous Polymerization

Will not occur.

Section 11 – Toxicological information

No acute or chronic effects are known from exposure to the intact product.

Primary Routes of Exposure:

None for the intact product. Inhalation and potential exposure to eyes, hands, lungs or other body parts are made with dust emitted from some of the installation/demolition processes.

Acute Effects

Breathing dust may cause acute mechanical respiratory irritation. Skin and eye contact may cause mechanical irritation.

Skin contact

Not classified as skin irritant.

Eye contact

Contact may cause mild discomfort.

Special remarks on chronic effects on humans

Crystalline Silica (SiO_2) – Exposure to respirable crystalline particles of a very small size (less than 10 microns) may cause silicosis, an incurable, progressively disabling and sometimes fatal lung disease. Silica particles become trapped in lung tissue, causing inflammation and scarring and reducing the lungs' ability to take in oxygen. Symptoms of silicosis can include progressive shortness of breath, cough and fatigue. Safety measures including wet cutting, grinding etc and the use of effective respiratory protection will reduce the burden of inhaled dust and prevent the disease.

Aluminium Oxide – Exposure to fine dust particles of very small size (less than 10 microns)

Calcium Oxide - Exposure to fine dust particles of very small size (less than 10 microns)

Carcinogenicity

The following component is listed by IARC[2] as a carcinogen:

Silica, Crystalline (quartz) – Group 1 Carcinogenic to humans.

Tetrogenicity: No available data

Mutagenicity: No available data

Reproductive Effects: No available data

Section 12 - Ecological information

Toxicity is expected to be low, based on the insolubility of the product and of the silica dust in water.

Section 13 - Disposal Considerations

Disposal method

Preferred options of disposal are recycling and landfill. Dispose of waste at an appropriate waste disposal facility according to current applicable laws and regulations.

If large amounts of dust or waste are created during the installation/demolition processes,

use a HEPA vacuum system or dampen spilled material with water and sweep up wet material to avoid dust generation. DO NOT DRY SWEEP. Wear appropriate respiratory protection and personal protective equipment (See section 8). Dispose of residue at an appropriate waste disposal facility.

Section 14 - Transport information

This material has been classified as non-dangerous according to ADG/IMO dangerous goods protocols. Thus, not regulated.

Section 15 – Regulatory information

Poisons Schedule

None

Regulations

Fire Hazard	No
Reactive Hazard	No
Release of Pressure	No
Acute Health Hazard	No
Chronic Health Hazard	Yes – if dust is inhaled
Corrosive Hazard	No

Section 16 – Other information

Hazard ratings according to: HCIS [3]

SDS Distribution

This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of person in your organization responsible for advising on safety matter.

Acronyms

CAS	Chemical Abstract Services
ADG	Australian Dangerous Goods
SDS	Safety Data Sheet
IMO	International Maritime Organization
TWA	Time weighted Average
PEL	Permissible Exposure Limit

Key Legend

1	Globally Harmonized System of Classification of labelling Chemicals (GHS)
2	International Agency for Research on Cancer
3	Hazardous Chemicals Identification System – Safe Work Australia

Created

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