Fenta

Safety Data Sheet

April 2021

1. INDENTIFICATION OF SUBSTANCE AND COMPANY

PRODUCT

Product name	Fenta Ceiling Tile™
Other names	Fenta™, Fenta Ceiling Tiles, previously known as “Hardiglaze Ceiling Tiles”
HSNO approval	Not applicable – Fenta Ceiling Tiles are a manufactured Article. The product is exempt under HSNO. The substance, if released, is approved under HSNO as Construction Products (Toxic [6.7A]) Group Standard 2006, HSR002545.
Approved description	Manufactured Article
UN number	NA
Proper Shipping Name	NA
Packaging Group	NA
Hazchem Code	NA
Uses	Fenta Ceiling Tiles are used as internal wet or dry ceiling linings.
Precautions	Fenta Ceiling Tiles are not classified as hazardous substances under HSNO. However, this product does contain crystalline silica, which may be released on cutting, grinding or drilling. For safe use of this product and technical advice, please refer to the Bases Surfaces website (www.batessurfaces.co.nz), email info@batessurfaces.co.nz or phone 0800 269 251.

COMPANY DETAILS

Company	Bates Surface Solutions Ltd	
Address	205 Station Road	PO Box 12-073
	Penrose	Penrose
	Auckland 1061	Auckland 1061
Telephone	0800 269 251	
Website	www.batessurfaces.co.nz	

POISON CENTRE NUMBER: 0800 764 766 (24 Hours)

2. HAZARD IDENTIFICATION

HAZARD CLASSIFICATIONS

This is a manufactured Article. The product is exempt under HSNO.

The substance, if released, is considered to be approved under HSNO as Construction products (Toxic [6.7A]) Group Standard 2006, HSR002545 and is classified as follows:

CLASSES	HAZARD PHRASES
6.4A	Causes eye irritation
6.7A	May cause cancer
6.9A	Causes damage to organs through prolonged or released exposure

SYMBOLS

DANGER

OTHER CLASSIFCATIONS

The dust and fibres of this substance may be irritating to the skin and respiratory tract as a result of physical (mechanical) reaction (ie. scratch). The irritation is not a result of a chemical reaction and therefore does not trigger these classifications under HSNO.

Health issues that may arise from exposure to this product relate to either dusts that have been generated from grinding or sanding operations, or from breakdown product as a result of burning of the product (eg. in a fire or cutting and welding).

PRECAUTIONARY STATEMENTS

Read label before use.

Wash hands thoroughly after handling.

Wear eye/face/respiratory protection.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust.

Do not eat, drink or smoke when using this product.

Further precautionary statements can be found in Section 4 – First Aid.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS/Identification	Class for ingredient(s)	Conc (%)
Polyurethane coating	proprietary	non-hazardous	>80%
Titanium Dioxide	13463-67-7	6.4A, 6.7B (IARC 2B)	>10%
Calcium Carbonate	1317-65-3	6.3A, 6.4A	>5%
Magnesium Silicate	1343-88-0	6.3B, 6.4A, 6.9A	<5%
May contain: Crystalline Silica (Quartz)	14808-60-7	6.7A, 6.9A	>0.1%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

Note: The living is considered inert. It is free of any solvent or other volatile materials (monomers, isocyanates). The inert cured film is a long chain polymer. It does not contain lead or other heavy metals.

4. FIRST AID

GENERAL INFORMATION

You should call the National Poisons Centre if you fell that you may have been harmed or irritated by the dust of this product. The number is 0800 764 766 (0800 POISON) (24-hour emergency service).

If medical advice is needed, have this SDS, product container or label at hand.

Recommended first aid station — Ready access to running water is recommended. Accessible eye wash is recommended.

EXPOSURE

Swallowed — Due to the nature of the product, this route of exposure is not expected under normal condition. Give a glass of water to drink. If a substantial quantity (eg. dust) has been chewed or swallowed, call the Poison Centre.

Eye contact — For dust: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.

Skin contact — For dust: If ON SKIN: Wash with plenty of soap and water.

Inhaled — IF INHALED: Dusts may cause irritation but are not likely to be harmful by inhalation. However, call a POISON CENTRE or doctor/physician if you feel unwell.

ADVICE TO DOCTOR

Treat symptomatically.

5. FIREFIGHTING MEASURES

Fire and explosion hazards There are no specific risks for fire/explosion for this chemical. It is non-flammable.

Suitable extinguishing substances Carbon dioxide, extinguishing powder, foam, fog sprays, water jets.

Unsuitable extinguishing substances Unknown.

Products of combustion Fenta Ceiling Tiles are non-flammable. Combustion of the polyurethane lining may form toxic gases eg. carbon monoxide, carbon dioxide, aromatic hydrocarbons, oxides of nitrogen, hydrogen cyanide. May form toxic mixtures in air and may accumulate in sums, pits and other low-lying spaces, forming potentially explosive mixtures.

Protective equipment No special measures are required.

Hazchem code 1T (recommended, no signage required).

6. ACCIDENTIAL RELEASE MEASURES

Containment There is no current legal requirement for secondary containment of this product. Prevent dust formed from the product from entering environment as it may clog drains and cause excess sediment in waterways.

Emergency procedures If a significant spill occurs: If there is any loose material, cover with packaging material, eg. plastics and reseal. Recycle or transfer to container for disposal. Dispose of according to the guidelines below (Section 13).

Clean-up method This product is not considered flammable or ecotoxic. Small spills do not require any special clean up method. Larger spills should be collected. Avoid dust formation, do not dry sweep. Use a HEPA vacuum or wet clean up methods.

Disposal Collect recoverable material into labelled containers for recycling or salvage. Recycle packaging wherever possible. This material may be suitable for approved landfill. Dispose of only in accordance with all regulations.

Precautions Use gloves and eye protection. See Section 8.

7. STORAGE AND HANDLING

Storage Keep from extreme heat, open flames and direct sunlight. Store all Fenta Ceiling Tiles product in a dry location. Avoid mechanical damage to the product, such as chipping of the edges and corners of the sheets. The product must be laid flat under cover on a smooth surface clear of the ground to avoid exposure to water or moisture.

Handling During installation and handling of this product: Work in outdoor area with ample ventilation. Minimise dust creation by using the recommended tooling and cutting methods. (Refer to the technical data sheet for tops on the safe handling of this product). See Section 8 with regard to personal protective equipment requirements. Work area should be cleaned regularly by wet sweeping or vacuuming.

8. EXPOSURE CONTROLS / PERSONAL PROTECTIVE EQUIPMENT

WORKPLACE EXPOSURE STANDARDS

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 910mg/m3 for dust and mists when limits have not otherwise been established.

NZ WORKPLACE EXPOSURE STANDARDS (2013)

Ingredient	WES-TWA	WES-STEL
Calcium Silicate	10mg.m3 (as inspirable dust)	No data
Crystalline Silica (Quartz)	0.2mg.m3 (as respirable dust)	No data
Cellulose (pipe fibre)	10mg/m3 (as respirable dust)	No data
Titanium dioxide	10mg/m3	No data
Calcium carbonate	10mg/m3	No data

ENGINEERING CONTROLS

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as Practicable by applying the hierarchy of control required by the Health and Safety in Employment Act 1992 (HSE). Exposure can be reduced by process modification, use of local ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of dusts are high, you are advised to modify processes or increase ventilation.

Follow the Health and Safety Guidelines for the Section and Safe Handling of Synthetic Mineral Fibres, published by the Department of Labour.

Minimise dust formation by sanding or grinding small amounts at a time. Use a sander with a vacuum attachment if possible. Brush or sweep up dust and do not allow it to accumulate. If possible, use an extractor fan.

When cutting or welding near the lining: remove as much of the paint as possible by mechanical means to minimize the amount that is burnt off. Increase ventilation or work outdoors (if possible).

PERSONAL PROTECTIVE EQUIPMENT

Eyes	If cutting product with power tools, avoid contact with eyes. Use safety glasses or dust resistant safety goggles if irritant levels of fibres and dusts are present.
Skin	Protective gloves and clothing should be worn when working with this product. Avoid direct contact with the dust or debris of this product. Work clothes should be laundered separately.
Respiratory	To prevent irritation a well fitted dust mask should be used (this is not recommended when exposure is close to the WES). A find particulate half or full-face respirator with an effective seal is recommended when airborne concentrations approach the WES (Section 8). If sanding, grinding, crushing or cutting this product, it is possible that the silica dust WES (0.2mg/m3) will be exceeded, hence a respirator will be required. If exposure to dust is likely, a full-face respirator with a particulate filter is recommended. When cutting and welding, it is possible that some toxic fumes may be emitted, therefore, it is essential to wear a respirator with an organic vapor cartridge and particulate filter. Consider using a handheld welding mask instead of a fitted welding mask.
WES ADDITIONAL INFORMATION	Not applicable.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Ceiling tile panels with various dimensions according to product profiles
Odour	no odour
pH	no pH data
Vapour pressure	not applicable
Boiling point	no data
Volatile materials	no data
Solubility	not applicable
Specific gravity / density	no data
Flash point	not flammable
Danger of explosion	no data
Auto-ignition temperature	no data
Upper and lower flammable limits	no data
Corrosiveness	non-corrosive

10. STABILITY AND REACTIVITY

Stability	Stable
Conditions to be avoided	Packaging should be kept intact in order to avoid contamination. Keep from extreme heat, open flames and direct sunlight.
Incompatible groups	None
Substance specific incompatibility	not known
Hazardous decomposition products	Products of combustion of polyurethane lining: carbon monoxide, carbon dioxide, aromatic hydrocarbons, oxides of nitrogen, hydrogen cyanide.
Hazardous reactions	none known

11. TOXICOLOGICAL INFORMATION

SUMMARY

IF SWALLOWED: unlikely that any effects occur, due to the physical nature of the product. Swallowing of the dust may result in abdominal discomfort and irritation.

IF IN EYES: contact with fibre cement dust can result in irritation of the eye causing watering and redness.

IF ON SKIN: may cause temporary irritation and itching of the skin. The dust is not absorbed through the skin.

IF INHALED: there may be irritation of the respiratory tract is dust is inhaled. Short term (acute) silicosis (see "systemic" below) can also occur with one-off exposures in very high levels of fine crystalline silica dust. Other short-term effects include irritation, choking and difficulty beathing.

CRONIC EFFECTS: dust does contain crystalline silica, inhalation of which has been linked to silicosis and lung cancer. Symptoms include shortness of breath, cough, fever, loss of appetite and cyanosis (bluish skin). See carcinogenicity and systemic toxicity below.

SUPPORTING DATA

Acute	**Oral**	The estimated LD50 (oral, rat) for the mixture is >5,000mg/kg. Data considered: Calcium Silicate: 3400mg/kg (rat).
	Dermal	No evidence of acute dermal toxicity.
	Inhaled	The substance is not considered acutely toxic if inhaled.
	Eye	The dust generated from this product is considered to be ab eye irritant. Calcium Silicate is slightly irritating to the eye.
	Skin	The dust from this product is not classed as a skin irritant. The dust is not absorbed through the skin.
Chronic	**Sensitisation**	No evidence of skin sensitisation or respiratory sensitisation.
	Mutagenicity	No ingredients present at concentrations >0.1% is considered a mutagen.
	Carcinogenicity	The dust resulting from this product does contain crystalline silica. Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC Group 1). The carcinogenicity of silica is related to long terms (eg. 10 years) inhalation of very fine particulate (eg. from sand blasting or dry cutting of concrete). Carcinogenicity of silica appears linked to development of silicosis (see systematic below) followed by complications and, eventually lung cancer. This product also contains Titanium dioxide, which is an IARC Group 2B carcinogen (possibly carcinogenic to humans).
	Reproductive/Developmental	No ingredient present at concentrations >0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation. The dust of this product is considered to be a target organ toxicant, because of the presence of crystalline silica at greater than 1%.
	Systemic	Crystalline silica triggers 6.9A classification if it is in the form of a fine respirable dust in an occupational (chronic exposure) setting. This is due to the development of acute silicosis which can occur following exposure to extremely high levels of fine silica dust. Silicosis is a type of pneumoconiosis – a disease of the lung that causes inflammation, scar tissue, lesions and fibrosus in the lunch (alveolar). Symptoms include shortness of breath, cough, fever, loss of appetite and cyanosis (bluish skin). Silicosis can occur following prolonged exposure (eg. 10 years) to relative high levels of fine crystalline silica. Dust. Based on limited animal research, it is

	possible that repeated inhalation of cellulose fibre dust may lead to inflammation and scarring of the lung.
Aggravation of existing conditions	Persons with impaired respiratory functions and respiratory disease may be adversely affected if exposed to excessive concentrations of dust created from working with this product. Smokers have an increased risk of lung cancer and silicosis.

12. ECOLOGICAL DATA

SUMMARY

This material is not considered to be ecotoxic. Dust generated from this material is not considered ecotoxic.

SUPPORTING DATA

Aquatic	The mixture of not considered to be toxic in the aqueous environment.
Bioaccumulation	Fenta Ceiling Tiles are not considered bio persistent.
Degradability	No data
Soil	The mixture is not considered to be toxic in the soil environment.
Terrestrial vertebrate	This product is not considered harmful to terrestrial vertebrates. No LC50 (diet) data for ingredients are available and the classification is based on the LD50 (oral) – see Section 11 – Oral Toxicity.
Terrestrial invertebrate	The mixture is not considered harmful to terrestrial invertebrates.
Biocidal	Not designed as a biocide.

13. DISPOSAL CONSIDERATIONS

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply.
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. Place in sealable plastic bags and label as construction waste.
Contaminated packaging	Preferably recycle packaging, otherwise send to landfill or similar.

14. TRANSPORT INFORMATION

Transport according to NZS 5433 (Transport of Hazardous Substances on Land). There are no specific restrictions for the product (not a dangerous good).

UN number:	NA	**Proper shipping name:**	NA
Class(es):	NA	**Packaging group:**	NA
Precautions:	NA	**Hazchem code:**	NA

15. REGULATORY INFORMATION

This is a manufactured Article. The product us exempt under HSNO. The substance, if released, is considered to be approved under HSNO as Construction Products (Toxic [6.7] Group Standard 2006, HSR002545, hence the following controls apply if the substance is released and/or during manufacturing processes.

SPECIFIC WORKPLACE CONTROLS (as per HSNO approval referenced to Controls Matrix) for released substance

Key workplace requirements are:

SDS	Required if storing any quantity
Emergency plan	Required if storing >1000kg (dust)
Approved handler*	Not required. Exemptions from Approved Handler and other requirements relating to 6.7 only if being used in the construction industry.
Tracking	Not required
Bunding and secondary containment	Required is storing >1000kg (dust)
Signage	Not required

Location test certificate	Not required
Flammable zone	Not required
Fire extinguisher	Not required

*NOTE: Exemptions from Approved Handler and other requirements relating to 6.7A apply only if substance is used in the construction industry.

OTHER LEGISLATION

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, The Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

16. OTHER INFORMATION

ABBREVIATIONS

Approval Code	Dust released from the product: Approval HSR002545, Construction Products (Toxic 6.7) Group Standard 2006 Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Mix	List of default controls linking regulation numbers to Matrix code (eg. T1, I16).
EC50	Ecotoxic Concentration 50% - concentration in water which is fatal to 50% of a rest population (eg. daphnia, fish species).
EPA	Environmental Protection Authority (formerly known as ERMA).
ERMA	Environmental Risk Management Authority (known as EPA).
HAZCHAM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters.
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD50	Lethal Dose 50% - does which is fatal to 50% of a test population (usually rats).
LC50	Lethal Concentration 50% - concentration in air which is fatal to 50% of a test population (usually rats)
MSDS/SDS	Material Safety Data Sheet (or Safety Data Sheet)
OSH	The Occupational Safety and Health Service of the Department of Labour (NZ)
STEL	Short Term Exposure Limit – the maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15-minute period, provided the TWA is not exceeded.
TWA	Time Weighted Average – generally referred to WES averaged over typical workday (usually 8 hours)
UEL	Upper Explosive Limited
UN Number	United Nations Number
WES	Workplace Exposure Standard – the airborne concentration of a biological or chemical agent to which a worker may be exposed in a workday.

REFERENCES

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID) http:/www.epa.govt.nz/hs/compliance/chemicals.html, for specific chemicals.
EPA Transfer Gazettes	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
Controls MIX	Part of the EPA New Zealand User Guide to the HSNO Control Regulations
WES 2013	The NZ Workplace Exposure Standards Effective from 2011, published by WorkSafe NZ and available on their website – www.worksafe.govt.nz.

REVIEW

Date	Reason
April 2014	Finalised MSDS
April 2021	Fenta logo change, changed MSDS to SDS

DISCLAIMER

This SDS was prepared by Datachem Ltd and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarized in the SDS) and how the substance is used. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications are based on our experience, EPA Guidelines and international classifications. To contact the SDS author, email info@datachem.co.nz or phone +64 9 940 3080.

Datachem

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