Safety Data Sheet

1. Identification of Substance & Company

Product

Product name Strongcrete Supa Coat Plaster

HSNO approval HSR002545

Approval description Construction Products (Toxic [6.7A]) Group Standard 2017

UN number NA

Proper Shipping Name
Packaging group
NA
Hazchem code
Uses
Not allocated
NA
NA
Plaster

Company Details

Telephone Fax number

Website

Company Drymix NZ Ltd
Address PO Box 109,

Greenhithe, Auckland 0756, New Zealand 0800-379-746 0800-379-649 www.drymix.co.nz

Emergency Telephone Number: 0800 764 766

2. Hazard Identification

Approval and

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002545, Construction Products (Toxic [6.7A]) Group Standard 2017), and is classified as follows:

Classes	Hazard Statements
8.3A	H318 - Causes serious eye damage.
6.3A	H315 - Causes skin irritation.
6.7A	H350 - May cause cancer if inhaled.
6.9A	H372 - Causes damage to organs through prolonged or repeated exposure
9.1D	H402 - Harmful to aquatic life.

Notes:

Mortar is considered irritating to the skin under the classification system; however, there is a possibility of burns if wet mortar or cement mixtures are left in contact with the skin for a prolonged time.

Mortar may contain silica (as quartz) in trace amounts. 6.7A and 6.9A apply if quartz silica is present as a fine respirable dust.

SYMBOLS

DANGER



Other Classifications

There are no other Classifications that are known to apply.

Safety Data Sheet

Precautionary Statements

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P270 - Do not eat, drink or smoke when using this product.

P260 - Do not breathe dust.

P264 - Wash hands thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/eye protection/face protection.

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

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P310 - Immediately call a POISON CENTRE or doctor/physician."

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P332+P313 - If skin irritation occurs: Get medical advice/ attention.

P362 - Take off contaminated clothing and wash before re-use.

P405 - Store locked up.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Class for ingredient(s)	Conc (%)
mortar sand	NA	non hazardous	70-80
cement	65997-15-1	8.3A. 6.3A, 6.7A, 6.9A, 9.1D	15-25
lime	1305-78-8	8.2C, 8.3A	<0.5%

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

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). IF exposed or concerned: Get medical advice/ attention.

Recommended first aid

Ready access to running water is required. Accessible eyewash is required.

facilities

Inhaled

Swallowed IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. Contact a doctor if you feel

Eye contact 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. Immediately call a POISON CENTER or doctor.

Skin contact IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical

advice/attention. Wash contaminated clothing before reuse.

IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor. If experiencing respiratory symptoms:

Immediately call a POISON CENTER or doctor/physician.

Advice to Doctor

Treat symptomatically

Safety Data Sheet

Firefighting Measures

Fire and explosion hazards:

Suitable extinguishing

substances:

Unsuitable extinguishing

substances:

Products of combustion:

Unknown.

Product does not burn. Dust may form irritating atmosphere. Product will react

There are no specific risks for fire/explosion for this chemical. It is non-combustible.

exothermically with water. Contaminated water wil be strongly alkaline. Product may decompose in a fire and produce toxic or corrosive fumes.

Protective equipment: Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat

and eye protection.

Not applicable.

Hazchem code: 1T (recommended)

Accidental Release Measures

Containment If greater than 1000kg (wet product or dust) is stored, secondary containment is required.

Emergency plans to manage any potential spills must be in place. Prevent spillage from

spreading or entering soil, waterways or drains.

In the event of large spillage (>100kg) of the dry or wetted mixture alert the fire brigade to **Emergency procedures**

location and give brief description of hazard.

Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of

any unprotected personnel. Contain spill. Prevent by whatever means possible any

spillage from entering drains, sewers, or water courses.

Clean-up method Collect product avoiding any dust formation, and seal in properly labelled containers or

drums for disposal. If contamination of crops, sewers or waterways has occurred advise

local emergency services.

Disposal Mop up and collect recoverable material into labelled containers for recycling or salvage.

Recycle containers wherever possible. This material may be suitable for approved

landfill. Dispose of only in accord with all regulations.

The dust may form irritating atmosphere. Contaminated water will be strongly alkaline. Do **Precautions**

not allow contaminated water to enter the environment.

Wear protective equipment to prevent skin and eye contamination and the inhalation of

dust. Work up wind or increase ventilation.

7. Storage & Handling

Storage Avoid storage of harmful substances with food. Store out of reach of children.

Containers should be kept closed in order to minimise contamination. Keep in a cool, dry

place. Avoid contact with incompatible substances as listed in Section 10.

Handling Keep exposure to a minimum, and minimise the quantities kept in work areas. Minimise

dust generation and accumulation. See section 8 with regard to personal protective

equipment requirements. Avoid skin and eye contact and inhalation of dust.

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 3mg/m³ for respirable particulates and 10mg/m³ for inhalable particulates when limits have not otherwise been established.

NZ Workplace	Ingredient	WES-TWA	WES-STEL
Exposure Stds	mortar Sand	10mg/m ³ (as nuisance dust)	no data
	cement	10mg/m³ (as nuisance dust)	no data
	limestone	10mg/m³ (as nuisance dust)	no data
	crystalline Silica (as quartz)	0.1mg/m³ (as respirable dust)	no data

Safety Data Sheet

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 at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes



Protect eyes with goggles, safety glasses or full face mask. Avoid wearing contact lenses.

Skin



Avoid repeated or prolonged skin contact. Wear overalls, waterproof boots and impervious alkali-resistant gloves (e.g., nitrile, PVC, rubber, neoprene). Tuck overalls inside boots and seal with duct tape to reduce risk of mortar entering boots.



Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Take special care to ensure that cuts/abrasions or irritated skin are not exposed to this product. It is also important to ensure that wet mortar does not become trapped within gloves, boots or clothing – leaving mortar in contact with the skin for extended period of time may cause skin burns.



It is important that skin is also covered when mortar dust is created (e.g., sanding, grinding, crushing or cutting mortar). The dust may also irritate and/or damage the skin.

Respiratory



To prevent irritation a well fitted dust mask should be used (this is not recommended when exposure is close to the WES). A fine 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 mortar, it is possible that the silica dust WES (0.02 mg/m³) will be exceeded, hence a respirator will be required. If exposure to the concentrated aqueous solution, dust and mist is likely, a full face respirator with a particulate filter is recommended.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance Grey solid
Odour Bland
pH <8

Vapour pressureNot applicableViscosityNo dataBoiling pointNot applicableVolatile materialsNo dataFreezing / melting pointNo data

Solubility Insoluble in hardened state, slightly soluble in wet state.

Specific gravity / density
Flash point
Danger of explosion
Auto-ignition temperature
Upper & lower flammable limits

1.5g/cm³
Not applicable
No data
Not applicable

Corrosiveness May be corrosive when wet. Note that dust is also corrosive when mixed with water.



Safety Data Sheet

10. Stability & Reactivity

Stability This product is unlikely to react or decompose under normal storage conditions. This

product will not undergo polymerisation reactions. Keep dry until used.

Conditions to be avoided Containers should be kept closed in order to avoid contamination. Incompatible groups Strong acids, ammonium salts, and aluminum metal.

Substance Specific IncompatibilityMortar dissolves in hydrofluoric acid producing corrosive silicon tetrafluoride gas.

Silicates react with powerful oxidizers such as fluorine, chlorine, trifluorides, and oxygen

difluoride.

Hazardous decomposition

products

Hazardous reactions

Does not readily decompose. Respirable dust particles may be generated when mortar is

sawed, drilled, sanded or grinded.

Will not polymerise

11. Toxicological Information

Summary

IF SWALLOWED: large amounts of dust may result in abdominal discomfort and irritation and burns to the gastrointestinal tract.

IF IN EYES: Contact with wet (unhardened) mortar, mortar mixtures or dust can cause effects ranging from irritation to serious eye damage/burns and blindness. If product is washed out of the eye immediately, effects can be minor. However, if dust or wet mortar is left in contact with the eye, serious damage/blindness could result.

IF ON SKIN: Contact with wet (unhardened) mortar can cause skin irritation or severe chemical burns. Brief exposure to the dust (i.e., washed off immediately) may result in irritation. However, if the mortar or dust is left on the skin for an extended time burns to the skin are possible. Thickening of the skin and/or rash is also possible.

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

CHRONIC: this product 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.

Support	ing Dala	
Acute	Oral	The estimated LD $_{50}$ (oral, rat) for the mixture is > 5,000 mg/kg. Ingestion of this product may cause gastrointestinal irritation.
	Dermal	The estimated LD ₅₀ (dermal, rat) for the mixture is $> 5,000$ mg/kg.
	Inhaled	The estimated LC ₅₀ (inhalation, rat) for the mixture is >5 mg/L (dust mist). Short term (acute) silicosis (see "systemic" below) can also occur with one-off exposures to extremely high levels of fine crystalline silica dust. Other short term effects include irritation, choking and difficulty breathing.
	Eye	Contact with wet (unhardened) mortar, cement mixtures or dust can cause effects ranging from irritation to serious eye damage/burns and blindness. The pH of the mixture is >12. Note: the level of irritation/damage is dependent on the quantity of the dust, the pH, and the length of time exposed. E.g., if dust is washed out of the eye immediately, effects will be minor. However, if dust or wet mortar is left in contact with the eye, serious damage/blindness could result.
	Skin	Contact with wet (unhardened) mortar, cement mixtures or dust can cause skin irritation, severe chemical burns (third degree). Drying mortar is hygroscopic, i.e. absorbs water. It will draw water away from any material it contacts-including skin. This may cause irritation – particularly in hot conditions or when sweating. Brief exposure to the skin (i.e., washed off immediately) will result in irritation. However, if the mortar or dust is left on the skin for an extended time (e.g., if inside boots or absorbed through overalls), burns to the skin are possible. Thickening of the skin and/or rash is also possible.

Safety Data Sheet

Chronic Sensitisation There is evidence that chromium present in some mortar mixtures may induce

occupational asthma and skin sensitisation (allergic reactions). This mixture contains less

than 0.01% hexavalent chromium and hence is not considered sensitising.

No ingredient present at concentrations > 0.1% is considered a mutagen.

Mutagenicity Carcinogenicity

This mixture 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 mixture triggers 6.7A classification (confirmed carcinogen). The carcinogenicity of silica is related to long term (e.g., 10 years) inhalation of very fine particulate (e.g., from sand blasting or dry cutting of mortar). Carcinogenicity of silica appears linked to development of silicosis (see systematic below) followed by complications and, eventually lung cancer No data for mixture is available. No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via

Reproductive / **Developmental**

lactation

Systemic The mixture is considered to be a target organ toxicant, because of the presence of

> crystalline silica at greater than 1%. 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 fibrosis in the lung (alveolar). Symptoms include shortness of breath, cough, fever, loss of appetite and cyanosis (bluish skin). Silicosis can occur following prolonged exposure (e.g., 10 years)

to relatively high levels of fine crystalline silica dust.

Aggravation of existing conditions Persons with existing lung conditions may be at a higher risk of further adverse health effects (as above). Smokers have an increased risk of lung cancer and silicosis.

12. **Ecological Data**

Summary

Mortar and cement dusts are considered to be harmful in the environment when in a soluble form. This is primarily due to the high pH of the product.

Supporting Data

Aquatic No data for mixture is available. Using EC50's for ingredients, the estimated EC50 for the

mixture is between 1 and 100 mg/L. This implies that mortar should be considered

harmful in the aquatic environment.

Water contaminated with this product is alkaline and should not be allowed to enter the

environment. Not applicable

Bioaccumulation

Degradability Not applicable (predominantly natural products)

Soil No data available for the mixture. The soil toxicity value for the mixture is estimated to be

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.

Environmental effect levels No EELs are available for this mixture or ingredients

Disposal Considerations

Restrictions There are no product-specific restrictions, however, local council and resource consent

conditions may apply, including requirements of trade waste consents.

Disposal method Disposal of this product must comply with the Hazardous Substances (Disposal) Notice 2017 and the requirements of the Resource Management Act for which approval should

be sought from the Regional Authority. The substance must be treated and therefore

rendered non-hazardous before discharge to the environment.

Contaminated packaging Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12. Ensure that the package is rendered incapable of

containing any substance and is disposed in a manner that is consistent with the requirements of the substance it contained and the material of the package. If possible

reuse or recycle packaging.

Safety Data Sheet

14. Transport Information

Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007

This mixture is not considered a hazardous substance for transport on land.

UN number:NAProper shipping name:NAClass(es)NAPacking group:NAPrecautions:NAHazchem code:NA

IMDG

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN number:NAProper shipping name:NAClass(es)NAPacking group:NAPrecautions:NAEmSNA

IATA

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN number:NAProper shipping name:NAClass(es)NAPacking group:NAPrecautions:NAERG CodeNA

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002545: Construction Products (Toxic [6.7A]) Group Standard 2017. All ingredients appear in the NZIoC.

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Note: the controls apply to the wet product, and to the dust of hardened mortar.

Key workplace requirements are:

SDS To be available within 10 minutes in workplaces storing any quantity.

Labelling No removal of labels and/or decanting of product into other containers can occur.

Emergency plan Required if storing >1000kg.

Certified handler Not required.

Tracking Not required.

Bunding & secondary containment Not required for the dry substance. (solid). Wetted substance must comply if

>1000kg present.

Signage Required if > 1000kg is stored.

Location compliance certificate Not required.
Flammable zone Not required.
Fire extinguisher Not required.

Stationary containers Must comply with the controls for stationary container systems as set out in Parts 1

to 19 of Schedule 8 of the Hazardous Substances (Dangerous Goods and

Schedule Toxic Substances) Transfer Notice 2004.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

Safety Data Sheet

16. Other Information

Abbreviations

Approval Code Approval Construction Products (Toxic [6.7A]) Group Standard 2017, Controls, EPA.

www.epa.govt.nz

CAS Number Unique Chemical Abstracts Service Registry Number

Ceiling Exposure Value: The maximum airborne concentration of a biological or

chemical agent to which a worker may be exposed at any time.

Controls MatrixList of default controls linking regulation numbers to Matrix code (e.g. T1, I16). **EC**₅₀
Ecotoxic Concentration 50% − concentration in water which is fatal to 50% of a test

population (e.g. daphnia, fish species)

EPA Environmental Protection Authority

HAZCHEM 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% – dose which is fatal to 50% of a test population (usually rats).

Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population

(usually rats)

NZIoC New Zealand Inventory of Chemicals

MSDS (SDS)

Material Safety Data Sheet (or Safety Data Sheet)

PES Prescribed Exposure Standard means a WES or a biological exposure standard that is

prescribed in a regulation, a safe work instrument or an approval under HSNO (including

group standards).

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

Time Weighted Average – generally referred to WES averaged over typical work day

(usually 8 hours)

UELUpper Explosive LimitUN NumberUnited Nations Number

WES Workplace Exposure Standard - The airborne concentration of a biological or chemical

agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring

using procedures that gather air samples in the worker's breathing zone.

References

Unless otherwise stated comes from the EPA HSNO chemical classification information

database (CCID).

Controls EPA notices, www.epa.govt.nz, Health and Safety at Work (Hazardous Substances)

Regulations 2017, www.legislation.govt.nz

WES The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available

on their web site – www.worksafe.govt.nz.

Other References: EU ECHA, ingredients SDS's, ChemIDplus

Review

Date

June 2017

May 2018

Reason for review

Not applicable – new SDS

Review of section 3, 14 and 15.

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 summarised 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 for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: +64 9 940 30 80.

