

## 1. Identification of Substance & Company

### Product

<b>Product name</b>	AllCo DensDeck Products
<b>Other names</b>	DensDeck Roof Board, DensDeck Prime Roof Board
<b>HSNO approval</b>	Not applicable – DensDeck is a manufactured Article. The product is exempt under HSNO. DensDeck products contain crystalline silica, which is an approved substance under HSNO as Construction Products (Carcinogen) Group Standard 2020, HSR002545.
<b>Approval description</b>	Manufactured Article
<b>UN number</b>	NA
<b>Proper Shipping Name</b>	NA
<b>Packaging group</b>	NA
<b>Hazchem code</b>	NA
<b>Uses</b>	DensDeck products are used as roofing boards.
<b>Precautions:</b>	DensDeck products listed are not classified as hazardous substances under HSNO. However these products contain traces of crystalline silica, which may be released on cutting, grinding or drilling.

### Company Details

<b>Company</b>	Allco Waterproofing Solutions	
<b>Address</b>	5 Te Kea Place	PO Box 101-903
	Albany	North Shore City
	Auckland	0745
	New Zealand	New Zealand
<b>Telephone</b>	+64 9 448 1185	
<b>Website</b>	www.allco.co.nz	
	<b>Emergency Telephone Number: 0800 764 766 (24 Hours)</b>	

## 2. Hazard Identification

### NZ Approval

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

The following classification applies to any respirable crystalline silica dust potentially released from AllCo DensDeck Products, e.g. during cutting, drilling, grinding or rebating in the course of installation and handling of this product. The intact DensDeck products are not expected to result in any adverse toxic effects.

### GHS Classes

Carcinogen category 1  
STOT repeated exposure category 1

### Hazard Statements

H350 - May cause cancer through inhalation of dust.  
H372 - Causes damage to lungs and respiratory system through prolonged or repeated exposure by inhalation of dusts.

STOT – system target organ toxicity

### SYMBOLS

**DANGER**



### Other Classifications

The dust and fibres of this substance may be irritating to the skin and respiratory tract as a result of physical (mechanical) reaction (i.e. scratch). The irritation is not a result of a chemical reaction and therefore does not trigger these classifications under GHS 7.

### Precautionary Statements

The following precautionary statements apply to handling and installation of this product and if respirable dust is created during processing/handling and installation. For details of personal protective equipment refer to section 8.

#### Prevention

P201	Obtain special instruction before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust.
P264	Wash hands and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P281	Use personal protective equipment as required.

#### Response

P308+P313	IF exposed or concerned: get medical advice
P314	Get medical advice if you feel unwell.

#### Disposal

P501	Dispose of products in accordance with local/regional/national/international regulations.
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### 3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Calcium Sulphate dihydrate*	10101-41-4	80-100%
Vermiculite*	1318-00-9	0-10
Continuous filament glass fibres	65997-17-3	1-5%
Crystalline Silica (Quartz)**	14808-60-7	0.1-1%

The exact ratio of components will vary between specific products. Trace quantities of impurities are also likely.

\*Gypsum and Vermiculite are naturally occurring compounds that may contain crystalline silica.

\*\* the weight percent listed is the total crystalline silica and not the respirable fraction. Testing did not detect respirable crystalline silica during activities associated with the normal use of this products.

### 4. First Aid

#### General Information

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

If shortness of breath or other health concerns develop after exposure to dust from the product, seek medical attention.

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

**Recommended first aid facilities** Ready access to running water is recommended.

#### Exposure

<b>Swallowed</b>	Due to the nature of the product, this route of exposure is not expected under normal conditions. Give a glass of water to drink. If a substantial quantity has been swallowed, call the Poison Centre.
<b>Eye contact</b>	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.
<b>Skin contact</b>	IF ON SKIN: Wash with plenty of soap and water. Get medical advice if irritation occurs or persists.
<b>Inhaled</b>	IF INHALED: Dusts may cause irritation. If experiencing irritation, remove to fresh air. Drink water to clear throat. If shortness of breath or wheezing develops, seek medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

#### Advice to Doctor

Treat symptomatically.

## 5. Firefighting Measures

<b>Fire and explosion hazards:</b>	There are no specific risks for fire/explosion for this chemical. It is not classed as flammable.
<b>Suitable extinguishing substances:</b>	Carbon dioxide, extinguishing powder, foam, fog sprays, water jets.
<b>Unsuitable extinguishing substances:</b>	Unknown.
<b>Products of combustion:</b>	DensDeck products are non flammable. The packaging may decompose in a fire resulting in carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
<b>Protective equipment:</b>	No special measures are required.
<b>Hazchem code:</b>	NA

## 6. Accidental Release Measures

<b>Containment</b>	There is no current legal requirement for secondary containment of this product. Prevent dust formed from the product from entering environment as it may clogg drains and cause excess sediment in waterways.
<b>Emergency procedures</b>	This product is not considered flammable or ecotoxic. If a significant spill occurs: Wear protective equipment to prevent skin, eye and respiratory exposure to dusts. Clear area of any unprotected personnel. Avoid creating dust. If appropriate, use a gentle water spray to wet material to minimise dust generation.
<b>Clean-up method</b>	If possible to wet the dust, wet and sweep up the solid. Dry sweeping should not be attempted. Vacuuming with an M-class industrial vacuum. Do not wash material down stormwater drains.
<b>Disposal</b>	Collect recoverable material into labelled containers for recycling or salvage. This material may be suitable for approved landfill. Dispose of only in accord with all regulations. See section 14.
<b>Precautions</b>	Wear protective equipment to prevent eye contamination and the inhalation of dusts. Work up wind or increase ventilation.

## 7. Storage & Handling

<b>Storage</b>	Avoid storage near food and beverages. Avoid contact with incompatible substances as listed in Section 10. Store all DensDeck products 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.
<b>Handling</b>	Keep exposure to crystalline silica dust to a minimum, and minimise the quantities of dust in work areas. During installation and handling of this product: Wherever possible, practices likely to generate dust should be carried out in well-ventilated areas (e.g.outdoors). Minimise dust creation by using the recommended tooling and cutting methods. Work area should be cleaned regularly by wet sweeping or vacuuming. Keep away from incompatible substances (section 10).

## 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 3mg/m<sup>3</sup> for respirable particulates and 10mg/m<sup>3</sup> for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds	Ingredient	WES-TWA	WES-STEL
	Calcium Silicate	10mg/m <sup>3</sup>	-
	Crystalline silica:	0.05mg/m <sup>3</sup> (as respirable dust)	-
	Vermiculite	Not listed	Not listed

### 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 airborne concentrations of dusts are high, you are advised to modify processes or increase ventilation.

During clean-up, use a well-maintained vacuum and filter appropriate for capturing fine respirable dust or use wet clean-up methods, never dry sweep.

### Personal Protective Equipment

#### General

Personal Protective Equipment (PPE) should not be used as the primary means of exposure protection, except in the event of an accident or emergency situation or where all other means of protection have proven to inadequate. Clean PPE after use or dispose of as appropriate. Store PPE for re-use in a clean place. Regular training on the correct use of PPE should be provided. In particular the correct fitting and use of respirators and where applicable the cleaning of respirators should be undertaken.

#### Eyes



Avoid contact with eyes. Use safety glasses or goggles if irritant levels of dusts are present. Select eye protection in accordance with AS/NZS 1337.

#### Skin



Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves if concerned about irritation or dryness of the skin. Protective gloves or suitably resistant material must comply with AS 2161. Replace frequently. Gloves should be checked for tears or holes before use. Protective clothing must comply with AS 2919, AS3765.1 or AS3765.2. PVC or rubber boots must comply with AS/NZS 2210.2 and selected and maintained in accordance with AS/NS2210.1. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Wash hands after handling.

#### Respiratory



Respirators must have filters appropriate to the duty and comply with AS/NZS1716 and selected, used and maintained in accordance with AS/NS 1715. Select respirators based on the level of exposure to crystalline silica as measured by dust sampling. Use respirators that offer protection to the highest concentrations of crystalline silica if the actual concentrations are unknown. Put in place a respiratory protection and monitoring program. Monitoring for exposure to hazardous chemicals.

### WES Additional Information

Not applicable.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Gypsum boards - Solid
<b>Odour</b>	Low odour
<b>Odour Threshold</b>	no data
<b>pH</b>	6-8
<b>Freezing/melting point</b>	no data
<b>Boiling Point</b>	no data
<b>Flashpoint</b>	no data
<b>Flammability</b>	no data
<b>Upper &amp; lower flammable limits</b>	no data
<b>Vapour pressure</b>	no data
<b>Vapour density</b>	no data
<b>Specific gravity/density</b>	2.2-2.4
<b>Solubility</b>	0.2 % @ 22°C
<b>Partition coefficient</b>	no data
<b>Auto-ignition temperature</b>	no data
<b>Decomposition temperature</b>	no data
<b>Viscosity</b>	no data
<b>Particle Characteristics</b>	no data

## 10. Stability & Reactivity

<b>Stability</b>	Product is non reactive and stable.
<b>Conditions to be avoided</b>	Avoid the creation of dust during processing, handling and installation.
<b>Incompatible groups</b>	Hydrofluoric acid will dissolve silica and can generate silicon tetrafluoride, a corrosive gas. Contact with strong oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride or oxygen difluoride may cause fires and /or explosions. Furthermore, limestone is incompatible with acids and ammonium salts.
<b>Substance Specific Incompatibility</b>	May react with hydrofluoric acid to form toxic silicon tetra-fluoride gas.
<b>Hazardous decomposition products</b>	None known
<b>Hazardous reactions</b>	Product is non reactive and stable.

## 11. Toxicological Information

### Summary

Gypsum board is non-toxic in its intact form. The following applies to respirable dust that may be generated during cutting, rebating, drilling, routing, sawing, crushing or otherwise abrading this product.

IF SWALLOWED: No adverse effects expected.

IF IN EYES: Dust may be irritating to eyes (mechanical irritation).

IF ON SKIN: This product is not absorbed through the skin. Dust may dry out the skin.

IF INHALED: Dusts may cause upper respiratory tract irritation, resulting in coughing and sneezing. Certain susceptible individuals may experience wheezing (spasms of the bronchial airways) upon inhaling dust during cutting, rebating, drilling, routing, sawing, crushing or otherwise abrading this product, and when cleaning up, disposing of or moving the dust.

CHRONIC EFFECTS: Long term exposure to high levels of fine nuisance dust may cause injury to lungs and the respiratory system. This product contains crystalline silica (quartz). Inhaling crystalline silica containing dusts can aggravate respiratory conditions such as asthma or emphysema. Long term exposure to crystalline silica dust can lead to silicosis, and there is limited evidence of carcinogenicity for crystalline silica dust. Acute silicosis may occur as a result of extremely high exposure to respirable crystalline silica over a short period (<5years). Accelerated silicosis can develop over 5-10 years of exposure to high levels of respirable crystalline silica. Chronic silicosis may develop as a result of lower levels of exposure to respirable crystalline silica over >10 years. In addition to silicosis there is some evidence that exposure to respirable crystalline silica may be linked to sclerodermal and an increased risk of kidney disease.

### Supporting Data

<b>Acute</b>	<b>Oral</b>	The estimated LD <sub>50</sub> (oral, rat) for the mixture is > 2000 mg/kg.
	<b>Dermal</b>	The estimated LD <sub>50</sub> (dermal, rat) for the mixture is > 2000 mg/kg.
<b>Chronic</b>	<b>Inhaled</b>	The substance is not considered acutely toxic if inhaled, however there may be irritation of the respiratory tract if dust is inhaled.
	<b>Eye</b>	The dust may cause eye irritation (mechanical).
	<b>Skin</b>	The mixture is not considered to be a skin irritant.
	<b>Sensitisation</b>	No evidence of skin sensitisation or respiratory sensitisation.
	<b>Mutagenicity</b>	No ingredient present at concentrations > 0.1% is considered a mutagen.
	<b>Carcinogenicity</b>	This product contains 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 term (e.g., 10 years) inhalation of very fine particulate (e.g., 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.
	<b>Reproductive / Developmental Systemic</b>	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation. There may be some irritation of the respiratory tract. This product contains crystalline silica which if it is in the form of a fine respirable dust may cause silicosis in an occupational setting. Exposure to respirable crystalline silica may also affect the immune system and the kidneys.
	<b>Aggravation of existing conditions</b>	disease such as, but not limited to bronchitis, emphysema and asthma. Some studies suggest that cigarette smoking increases the risk of silicosis, bronchitis and lung cancer in persons also exposed to crystalline silica.

## 12. Ecological Data

### Summary

This product is not considered ecotoxic.

### Supporting Data

<b>Aquatic</b>	The mixture is not considered to be toxic in the aqueous environment.
<b>Bioaccumulation</b>	This product is not considered biopersistent.
<b>Degradability</b>	No data
<b>Soil</b>	The mixture is not considered to be toxic in the soil environment.
<b>Terrestrial vertebrate</b>	This product is not considered harmful to terrestrial vertebrates. No LC <sub>50</sub> (diet) data for ingredients are available and the classification is based on the LD <sub>50</sub> (oral) – see section 11 – oral toxicity.
<b>Terrestrial invertebrate</b>	The mixture is not considered harmful to terrestrial invertebrates.
<b>Biocidal</b>	Not designed as a biocide.

## 13. Disposal Considerations

<b>Restrictions</b>	There are no product-specific restrictions, however, local council and resource consent conditions may apply. Disposal must comply with Hazardous Substances (Disposal) Notice 2017.
<b>Disposal method</b>	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. Place dust in sealable plastic bags and label as construction waste.
<b>Contaminated packaging</b>	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.

## 14. Transport Information

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

There are no specific restrictions for this product (not a dangerous good).

<b>UN number:</b>	NA	<b>Proper shipping name:</b>	NA
<b>Class(es)</b>	NA	<b>Packing group:</b>	NA
<b>Precautions:</b>	NA	<b>Hazchem code:</b>	NA

### IMDG

<b>UN number:</b>	NA	<b>Proper shipping name:</b>	Not regulated
<b>Class(es)</b>	NA	<b>Packing group:</b>	NA
<b>Precautions:</b>	NA	<b>EmS</b>	NA

### IATA

<b>UN number:</b>	NA	<b>Proper shipping name:</b>	Not regulated
<b>Class(es)</b>	NA	<b>Packing group:</b>	NA
<b>Precautions:</b>	NA	<b>ERG Guide</b>	NA

## 15. Regulatory Information

These products are Manufactured Articles. The products are exempt under HSNO. DensDeck products are not classified as hazardous substances under HSNO. However these products contain crystalline silica, which may be released on cutting, grinding or drilling. Crystalline silica is an approved substance under the HSNO act as Construction Products (Carcinogen) Group Standard 2020, HSR002545. All ingredients appear on the NZIoC.

### Specific Controls for crystalline silica (respirable)

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing any quantity.
Inventory	An inventory of all hazardous substances must be prepared and maintained.
Packaging	All hazardous substances should be appropriately packaged including substances that have been decanted, transferred or manufactured for own use or have been supplied
Labelling	Must comply with the Hazardous Substances (Labelling) Notice 2017.
Emergency plan	Required if storing >1000kg (dust).
Certified handler	Not required.
Tracking	Not required
Bunding and secondary containment	Required if storing >1000kg (dust)
Signage	Not required
Location compliance certificate	Not required
Flammable zone	Not required
Fire extinguisher	Not required.

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.

## 16. Other Information

### Abbreviations

<b>Approval Code</b>	Crystalline silica dust: Approval HSR002545, Construction Products (Carcinogen) Group Standard 2020 Controls, EPA. <a href="http://www.epa.govt.nz">www.epa.govt.nz</a>
<b>CAS Number</b>	Unique Chemical Abstracts Service Registry Number
<b>EC<sub>50</sub></b>	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
<b>EPA</b>	Environmental Protection Authority (New Zealand)
<b>GHS</b>	Globally Harmonised System of Classification and Labelling of Chemicals, 7 <sup>th</sup> revised edition, 2017, published by the United Nations.
<b>HAZCHEM Code</b>	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
<b>HSNO</b>	Hazardous Substances and New Organisms (Act and Regulations)
<b>IARC</b>	International Agency for Research on Cancer
<b>LEL</b>	Lower Explosive Limit
<b>LD<sub>50</sub></b>	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
<b>LC<sub>50</sub></b>	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
<b>NZIoC</b>	New Zealand Inventory of Chemicals
<b>STEL</b>	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
<b>STOT RE</b>	System Target Organ Toxicity – Repeated Exposure
<b>STOT SE</b>	System Target Organ Toxicity – Single Exposure
<b>TWA</b>	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
<b>UEL</b>	Upper Explosive Limit

**UN Number**  
**WES**

United Nations Number  
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**

**Data**

Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).

**Controls**

EPA notices, [www.epa.govt.nz](http://www.epa.govt.nz), Health and Safety at Work (Hazardous Substances) Regulations 2017, [www.legislation.govt.nz](http://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](http://www.worksafe.govt.nz).

**Other References:**

Suppliers SDS

**Review**

**Date**

July 2023

**Reason for review**

NA – new 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 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 GHS 7 classifications, are based on our experience, EPA Guidelines and international classifications. 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](mailto:info@datachem.co.nz) or phone: **+64 21 1040951**.

