

## 1. Identification of Substance & Company

### Product

<b>Product name</b>	Dricon HandiPatch®
<b>Other names</b>	NA
<b>Product code</b>	NA
<b>HSNO approval</b>	HSR002545
<b>Approval description</b>	Construction Products (Carcinogenic) Group Standard 2020
<b>UN number</b>	Not allocated
<b>DG Class</b>	NA
<b>Proper Shipping Name</b>	NA
<b>Packaging group</b>	NA
<b>Hazchem code</b>	NA
<b>Uses</b>	Repair of asphalt and concrete surfaces
<b>Precautions</b>	Handipatch is not classed as a hazardous substance under GHS 7. However this product does contain traces of crystalline silica, which may be released on cutting, grinding or drilling.

### Company Details

<b>Company</b>	<b>Dricon Firth Industries</b>	
<b>Address</b>	810 Great South Road Penrose Auckland, 1060 New Zealand	PO Box 14534 Panmure Auckland, 1741 New Zealand
<b>Telephone</b>	+64-9- 583 2121	
<b>Website</b>	www.dricon.co.nz	

**Emergency Telephone Number: 0800-764 766**

## 2. Hazard Identification

### Approval

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002545). The substance has been classified as hazardous according to the criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

This substance must comply with the relevant provisions of the Hazardous substances (Hazardous Property Controls) Notice 2017, however any construction product carrying a carcinogenicity Category 1 Classification due to its respirable silica content may be supplied to, used in or store in a place other than a workplace.

### GHS 7 Classes

### Hazard Statement

Carcinogenicity cat 1	H350 - May cause cancer if inhaled (contains crystalline silica)
STOT* RE cat 1	H372 - Causes damage to organs through prolonged or repeated exposure if inhaled. (may cause silicosis and effects to the lungs).

\*STOT – system target organ toxicity

### SYMBOLS

# DANGER



### Other Classifications

There are no other classifications that are known to apply.



### Precautionary Statements

**Prevention** P103 - Read label before use.  
P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P260 - Do not breathe dust .  
P264 - Wash hands 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/ attention.

**Storage** P405 - Store locked up.

**Disposal** P501 - Dispose of contents/container in accordance with local/regional/national/international regulation.

### 3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Bitumen	8052-42-4	<10%
Mineral aggregates (may contain traces of respirable crystalline silica)	14808-60-7	>60%
Proprietary polymer	Mixture	1-3%

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 by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

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

#### Exposure

**Swallowed** Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor if concerned.

**Eye contact** If product gets in eyes, wash material from them with running water for several minutes. If symptoms persist, seek medical advice.

**Skin contact** For contact with hot material, flush immediately with large amounts of water and seek medical advice immediately.  
Flush immediately with large amounts of water. Wash with soap and water. Remove all contaminated clothing. Contact a doctor if experiencing symptoms  
IF contact is with hot material, immerse or flush skin with water for at least 15 minutes. Call a doctor. Do not attempt to remove solidified material since removal may cause further tissue injury.

**Inhaled** 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.

#### Advice to Doctor

Treat symptomatically. See Section 11 for information on potential long term health effects from exposure to very fine crystalline silica dust.

### 5. Firefighting Measures

**Fire and explosion hazards:** There are no specific risks for fire/explosion for this chemical. This material can burn in a fire. .

**Suitable extinguishing substances:** Not applicable.

**Unsuitable extinguishing substances:** Unknown.

**Products of combustion:** Combustion products may include oxides of carbon, nitrogen and sulphur, hydrogen sulphide and steam.

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

**Hazchem code:** NA

### 6. Accidental Release Measures

<b>Containment Emergency procedures</b>	There is no current legal requirement for containment of this product. Generally, the containers size will limit a large spill from occurring. If a significant spill occurs:
<b>Clean-up method</b>	Stop leak if safe or necessary. Isolate area. Collect spill, see below. Transfer to container for disposal. Dispose of according to guidelines below (Section 13). This product is not considered flammable or ecotoxic. Small spills do not require any special clean up method. Larger spills (e.g., greater than 10kg) should be mopped up and collected.
<b>Disposal</b>	Avoid the generation of dust. Sweep up carefully or vacuum. 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.
<b>Precautions</b>	No special protective clothing is normally necessary.

### 7. Storage & Handling

<b>Storage</b>	Avoid storage of harmful substances with food. Containers should be kept closed in order to minimise contamination. Avoid contact with incompatible substances as listed in Section 10.
<b>Handling</b>	Keep exposure to a minimum, and minimise the quantities kept in work areas. Avoid creation of dusts. See section 8 with regard to personal protective equipment requirements.

### 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
	Crystalline silica	0.05mg/m <sup>3</sup> (respirable)	-

#### 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

<b>General</b>	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.
<b>Eyes</b>	Protective eyewear is not normally necessary when using this product. However, it always prudent to use protective eyewear if dust is likely.
<b>Skin</b>	Protective gloves and clothing are not normally necessary. However, it is prudent to wear gloves when handling chemicals in bulk or for an extended period of time.
<b>Respiratory</b>	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 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

<b>Appearance</b>	Black granular solid
<b>Odour</b>	Slight petroleum odour
<b>Odour Threshold</b>	no data
<b>pH</b>	no data
<b>Freezing/melting point</b>	no data
<b>Boiling Point</b>	no data
<b>Flashpoint</b>	>93°C
<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>	2.0-2.5
<b>Solubility</b>	Insoluble in water
<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>	Stable
<b>Conditions to be avoided</b>	Containers should be kept closed in order to avoid contamination. Keep from extreme heat, open flames and direct sunlight.
<b>Incompatible groups</b>	Strong oxidising agents such as chlorates, nitrates and peroxides, strong acids and bases
<b>Substance Specific Incompatibility</b>	None known
<b>Hazardous decomposition products</b>	Some toxic or irritating fumes may be released during thermal decomposition (e.g. fire), oxides of carbon, hydrogen sulphide, hydrocarbons.
<b>Hazardous reactions</b>	None known

## 11. Toxicological Information

### Summary

IF SWALLOWED: Ingestion of Handipatch may result in nausea, vomiting, diarrhoea and restlessness. Chewing asphalt has caused gastrointestinal effects. Stomach obstruction has been reported in individuals who have chewed and swallowed asphalt.

IF IN EYES: Airborne dust may cause immediate or delayed irritation or inflammation. Contact with Handipatch can cause moderate eye irritation, redness, and itchiness. Exposure requires immediate first aid to prevent damage to the eye. If heated, product will cause severe thermal burns.

IF ON SKIN: May cause dry skin, discomfort, irritation and dermatitis. Repeated contact may cause abrasion from asphalt cement. If heated, product will cause severe thermal burns.

IF INHALED: When heated Handipatch may release irritating fumes or vapours such as smoke, CO<sub>2</sub>, CO and unburned hydrocarbons. H<sub>2</sub>S and other sulphur-containing gases can evolve from this product at elevated temperatures. Exposure to fumes or vapours may cause irritation of the nose and throat, and symptoms such as headache, dizziness, loss of concentration and drowsiness. Cutting, crushing or grinding hardened asphalt will release dust. Breathing dust may cause lung, nose or throat irritation, including choking, depending on the degree of exposure.

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>	Using LD <sub>50</sub> 's for ingredients, the calculated LD <sub>50</sub> (oral, rat) for the mixture is >5,000 mg/kg.
	<b>Dermal</b>	Using LD <sub>50</sub> 's for ingredients, the calculated LD <sub>50</sub> (dermal, rat) for the mixture is >5000 mg/kg.
	<b>Inhaled</b>	No evidence of acute inhalation toxicity.



<b>Eye</b>	The mixture is not considered to be an eye irritant. Any irritation may be due to mechanical irritation of the particles.
<b>Chronic</b>	
<b>Skin</b>	The mixture is not considered to be a skin irritant under GHS 7.
<b>Sensitisation</b>	No ingredient present at concentrations > 0.1% is considered a sensitizer.
<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. 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. Some skin conditions can be aggravated by exposure.

## 12. Ecological Data

### Summary

This mixture is not considered ecotoxic. In all cases prevent this product from entering waterways, drains and sewers.

### Supporting Data

<b>Aquatic</b>	No evidence of aquatic ecotoxicity. Estimated EC <sub>50</sub> of the mixture is >100mg/L.
<b>Bioaccumulation</b>	No data
<b>Degradability</b>	No data
<b>Soil</b>	No evidence of soil ecotoxicity.
<b>Terrestrial vertebrate</b>	No evidence of toxicity towards terrestrial vertebrates.
<b>Terrestrial invertebrate</b>	No evidence of toxicity towards terrestrial invertebrates.
<b>Biocidal</b>	no data

## 13. Disposal Considerations

<b>Restrictions</b>	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
<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.
<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 hazardous 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**

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002545: Construction Products (Carcinogenic) Group Standard 2020. All ingredients appear on the NZIoC.

**NOTE:**

This substance must comply with the relevant provisions of the Hazardous substances (Hazardous Property Controls) Notice 2017, however any construction product carrying a carcinogenicity Category 1 Classification due to its respirable silica content may be supplied to, used in or store in a place other than a workplace.

**Specific Controls**

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 > 1000kg is stored.
Certified handler	Not required.
Tracking	Not required.
Bunding and secondary containment	Required if > 1000kg is stored.
Signage	Not required.
Location compliance certificate	Not required.
Flammable zone	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>	Approval Construction Products (Carcinogenic) 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>TWA</b>	Time Weighted Average – generally referred to WES averaged over typical work day



**UEL** (usually 8 hours)  
**UN Number** Upper Explosive Limit  
**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:** EU ECHA, Ingredients SDS's, ChemIDplus

**Review**

Date	Reason for Review
December 2023	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. A compliance record is available on request. 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**.

