
1. Identification of Substance & Company

Product

Product name	Drymix Dryproof Black Shield
HSNO approval	HSR002670
Approval description	Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006
UN number	NA
Proper Shipping Name	NA
DG class	NA
Packaging group	NA
Hazchem code	NA
Uses	Bitumen protective coating

Company Details

Company	Drymix NZ Ltd
Address	PO Box 109, Greenhithe Auckland 0756, New Zealand
Telephone	0800-379-746
Fax number	0800-379-649
Website	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 HSR002670, Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006), and is classified as follows:

Classes Hazard Statements

- 6.3B Causes mild skin irritation.
6.4A Causes eye irritation.

SYMBOLS**WARNING****Other Classifications**

Bitumen, if heated and used in roofing is classed by IARC as probably carcinogenic to humans Groups 2A (Occupational exposures to oxidized bitumens and their emissions during roofing are probably carcinogenic to humans (Group 2A).) This product contains bitumen as an emulsion in water.

Precautionary Statements

Precautionary Read label before use.
Wash hands thoroughly after handling.
Wear eye/face protection.
Further precautionary statements can be found in Section 4 – First Aid.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
polymer	proprietary	5-25%
bitumen emulsion	64742-93-4	50-60%
Ingredients not contributing to HSNO classes	mixture	balance

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).

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

Exposure

Swallowed Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor.
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. If eye irritation persists: Get medical advice.
Skin contact IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash before re-use.
Inhaled Generally, inhalation of fumes is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

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 not classed as flammable. Following evaporation of water the remaining components may decompose or burn.

Suitable extinguishing substances: Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.

Unsuitable extinguishing substances: Unknown.

Products of combustion: Carbon dioxide, and if combustion is incomplete, carbon monoxide, oxides of nitrogen and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.

Protective equipment: Fire fighters should wear self contained breathing apparatus.

Hazchem code: NA

6. Accidental Release Measures

Containment There is no current legal requirement for secondary containment of this product. Prevent product from entering environment.

Emergency procedures In the event of spillage alert the fire brigade to 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 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.

Precautions Do not allow contaminated water to enter the environment. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapour. 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. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour.

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 10mg/m³ for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds (2013)	Ingredient	WES-TWA	WES-STEL
	bitumen as asphalt fumes	0.5mg/m ³	data unavailable

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 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		To protect eyes, it is recommended that goggles, safety glasses or full face mask be worn. Avoid wearing contact lenses.
Skin		Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves, e.g. nitrile rubber or PVC gloves. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Wash hands after handling.
Respiratory		A respirator when airborne concentrations approach the WES (section 8) or if product is heated should be used. Use a respirator with an organic vapour cartridge with a particulate filter (dust/mist). Use If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance	black thixotropic liquid
Odour	no data
pH	no data
Vapour pressure	as for water
Vapour density	heavier than air
Boiling point	~100°C (water)
Volatile materials	no data
Freezing / melting point	no data
Solubility	completely soluble in water
Specific gravity / density	1.0kg/L
Flash point	NA
Danger of explosion	NA
Auto-ignition temperature	NA
Upper & lower flammable limits	NA
Corrosiveness	non corrosive

10. Stability & Reactivity

Stability	Stable
Conditions to be avoided	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
Incompatible groups	solvents, strong oxidisers, strong acids and alkalis
Substance Specific Incompatibility	none known
Hazardous decomposition products	none known
Hazardous reactions	none known

11. Toxicological Information

Summary

IF IN EYES: may cause eye irritation.

IF ON SKIN: prolonged or repeated contact with skin may result in slight skin irritation.

IF INHALED: excessive exposure to vapours or spray mist may cause slight irritation to throat.

CHRONIC: heating bitumen may release emissions that are probably carcinogenic to humans if inhaled.

Supporting Data

Acute	Oral	No evidence of acute oral toxicity.
	Dermal	No evidence of acute dermal toxicity.
	Inhaled	No evidence of acute inhalation toxicity. Fumes/vapours may be irritating to throat.
	Eye	The mixture is considered to be an eye irritant.
	Skin	The mixture is considered to be a skin irritant.
Chronic	Sensitisation	No ingredient present at concentrations > 0.1% is considered a sensitizer.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	Bitumen is classed by IARC as possibly carcinogenic to humans, group 2A. This refers to oxidised bitumen and their emissions during for roofing, e.g. when heated to a high temperature. This mixture is a water based emulsified bitumen and is used at room temperature. No emissions are expected during use. No studies have been carried out on water based emulsions of bitumen.
	Reproductive / Developmental Systemic Aggravation of existing conditions	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation. No ingredient present at concentrations > 1% is considered a target organ toxicant. None known.

12. Ecological Data

Summary

This mixture is not expected to be ecotoxic in the environment.

Supporting Data

Aquatic	No data for mixture is available. Using EC ₅₀ 's for ingredients, the estimated EC ₅₀ for the mixture is > 100 mg/L.
Bioaccumulation	Not applicable.
Degradability	Not applicable.
Soil	No data available for the mixture.
Terrestrial vertebrate	This product is not considered harmful to terrestrial vertebrates. No LC ₅₀ (diet) data for ingredients are available and the classification is based on the LD ₅₀ (oral) – see section 11 – oral toxicity.
Terrestrial invertebrate	The mixture is not considered harmful to terrestrial invertebrates.
Biocidal	Not applicable

13. Disposal Considerations

Restrictions	Local council and resource consent conditions may apply, including requirements of trade waste consents.
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. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

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:	NA	Proper shipping name:	NA
Class(es)	NA	Packing group:	NA
Precautions:	NA	Hazchem 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:	NA	Proper shipping name:	NA
Class(es)	NA	Packing group:	NA
Precautions:	NA	EmS	NA

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:	NA	Proper shipping name:	NA
Class(es)	NA	Packing group:	NA
Precautions:	NA	ERG Code	NA

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002670, Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006.

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

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing 50L
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Not required
Approved handler	Not required
Tracking	Not required
Bundling & secondary containment	Not required
Signage	Not required
Location test 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, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

All ingredients are listed in the New Zealand Inventory of Chemicals.

16. Other Information
Abbreviations

Approval Code	Approval HSR002670, Surface Coatings and Colourants (Subsidiary Hazard) 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 Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
ERMA	Environmental Risk Management Authority (now EPA)
EPA	Environmental Protection Agency (previously known as ERMA)
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).
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)
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 work day (usually 8 hours)
UEL	Upper Explosive Limit
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.

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 Matrix	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 web site – www.worksafe.govt.nz .
Other References:	Suppliers SDS, IARC entry for bitumen

Review

Date	Reason for review
May 2015	Not applicable – 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 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.

