



**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

**5. Firefighting Measures**

**Fire and explosion hazards:** There are no specific risks for fire/explosion for this chemical. Material can burn in a fire.  
**Suitable extinguishing substances:** Foam. Powder. Carbon dioxide (CO2). Dry chemical, foam, water fog.  
**Unsuitable extinguishing substances:** Do not use water jet as an extinguisher, as this will spread the fire.  
**Products of combustion:** 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.  
**Hazchem code:** NA

**6. Accidental Release Measures**

**Containment** In all cases design storage to prevent discharge to stormwater.  
**Emergency procedures** A large spill is unlikely due to the nature of the product (rolls of material). In the event of a large spillage (>100kg) alert the fire brigade to location and give brief description of hazard.  
Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council immediately).  
**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** 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** No special protective clothing is normally necessary.

**7. Storage & Handling**

**Storage** Store in a cool dry place.  
Avoid storage of harmful substances with food.  
Avoid contact with incompatible substances as listed in Section 10.  
**Handling** Do not breathe fumes/dusts, especially if this product is used as high temperatures.  
See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of fumes.

**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 Std	Ingredient	WES-TWA	WES-STEL
	Bitumen fumes	No NZ value, Australia: 5mg/m <sup>3</sup>	Not established

**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 be 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 is always prudent to use protective eyewear if fumes/dusts are likely.
<b>Skin</b>	If discomfort is felt (e.g., if pre-existing conditions exist, such as dermatitis, cuts or sensitive skin), gloves may be helpful. If you suffer from dermatitis type skin conditions, use gloves. Protective gloves or suitably resistant material must comply with AS 2161. Replace frequently. Gloves should be checked for tears or holes before use.
<b>Respiratory</b>	A respirator when airborne concentrations approach the WES (section 8). Respirators must have filters appropriate to the duty and comply with AS/NZS1716 and selected, used and maintained in accordance with AS/NS 1715. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order. Fit testing and clear guidelines and training for use and maintenance of PPE are necessary.

**WES Additional Information**

Not applicable

**9. Physical & Chemical Properties**

<b>Appearance</b>	coloured membrane rolls
<b>Odour</b>	slight bitumen odour
<b>Odour Threshold</b>	no data
<b>pH</b>	no data
<b>Freezing/melting point</b>	>100°C (bitumen)
<b>Boiling Point</b>	>470°C (bitumen)
<b>Flashpoint</b>	>230°C (bitumen)
<b>Flammability</b>	non flammable
<b>Upper &amp; lower flammable limits</b>	no LEL or UEL
<b>Vapour pressure</b>	no data
<b>Vapour density</b>	no data
<b>Specific gravity/density</b>	1-1.5kg/L
<b>Solubility</b>	insoluble in water
<b>Partition coefficient</b>	no data
<b>Auto-ignition temperature</b>	>485°C (bitumen)
<b>Decomposition temperature</b>	no data
<b>Viscosity</b>	not applicable
<b>Particle Characteristics</b>	no data

**10. Stability & Reactivity**

<b>Stability</b>	This product is unlikely to react or decompose under normal storage conditions. This product will not undergo polymerisation reactions. It is thermally stable.
<b>Conditions to be avoided</b>	Keep away from heat, flames and sparks.
<b>Incompatible groups</b>	Oxidising agents
<b>Substance Specific Incompatibility</b>	None known
<b>Hazardous decomposition products</b>	May emit oxides of carbon, oxides of nitrogen, smoke and other toxic fumes.
<b>Hazardous reactions</b>	none known

## 11. Toxicological Information

### Summary

IF SWALLOWED: low ingestion hazard. Unlikely route of entry, however if swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.  
 IF IN EYES: dusts may cause physical irritation to eyes.  
 IF ON SKIN: dusts may cause skin irritation (physical).  
 IF INHALED: dusts may cause irritation to mucous membranes.

### 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 >2000 mg/kg.
	<b>Dermal</b>	No evidence of dermal toxicity.
	<b>Inhaled</b>	No evidence of acute inhalation toxicity.
	<b>Eye</b>	The mixture is not considered to be an eye irritant.
	<b>Skin</b>	The mixture is not considered to be a skin irritant.
<b>Chronic</b>	<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>	No evidence of carcinogenicity.
	<b>Reproductive / Developmental</b>	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	<b>Systemic</b>	No evidence of system target organ toxicity.
	<b>Aggravation of existing conditions</b>	None known.

## 12. Ecological Data

### Summary

This mixture is not considered ecotoxic.

### Supporting Data

<b>Aquatic</b>	Using EC <sub>50</sub> 's for ingredients, the calculated EC <sub>50</sub> for the mixture is > 100 mg/L
<b>Bioaccumulation</b>	Not considered bioaccumulative.
<b>Degradability</b>	Not readily biodegradable
<b>Soil</b>	Not considered ecotoxic in the soil environment.
<b>Terrestrial vertebrate</b>	Not harmful towards terrestrial vertebrates
<b>Terrestrial invertebrate</b>	No evidence to toxicity towards terrestrial invertebrates
<b>Biocidal</b>	Not biocidal
<b>Environmental effect levels</b>	No EELs are available for this mixture or ingredients

## 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 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 substance is not considered to be hazardous under HSNO. All ingredients appear on the NZIoC.

**Specific Controls**

Key workplace requirements are:

SDS	Not required (non hazardous), but best practice to have the SDS available.
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	Not required.
Certified handler	Not required.
Tracking	Not required.
Bunding & secondary containment	Not required.
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>	NA – non hazardous.
<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

<b>HSNO</b>	services, especially fire fighters
<b>IARC</b>	Hazardous Substances and New Organisms (Act and Regulations)
<b>LEL</b>	International Agency for Research on Cancer
<b>LD<sub>50</sub></b>	Lower Explosive Limit
<b>LC<sub>50</sub></b>	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
<b>NZIoC</b>	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
<b>STEL</b>	New Zealand Inventory of Chemicals
<b>STOT RE</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 SE</b>	System Target Organ Toxicity – Repeated Exposure
<b>TWA</b>	System Target Organ Toxicity – Single Exposure
<b>UEL</b>	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
<b>UN Number</b>	Upper Explosive Limit
<b>WES</b>	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

<b>Data</b>	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
<b>EPA Notices</b>	<a href="http://www.epa.govt.nz">www.epa.govt.nz</a>
<b>WES</b>	The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – <a href="http://www.worksafe.govt.nz">www.worksafe.govt.nz</a> .
<b>Other References:</b>	Suppliers SDS

### Review

<b>Date</b>	<b>Reason for review</b>
March 2024	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 GHS 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](mailto:info@datachem.co.nz) or phone: +64 21 1040951

