

1. Identification of Substance & Company

Product

| | |
|-----------------------------|---|
| Product name | Asphalt in a bag |
| HSNO approval | HSR002679 |
| Approval description | Surface Coatings and Colourants (Toxic [6.7]) Group Standard 2006 |
| UN number | NA |
| Proper Shipping Name | NA |
| DG class | NA |
| Packaging group | NA |
| Hazchem code | NA |
| Uses | Repairing asphalt pavement, driveways and parking lots. |

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 HSR002679, Surface Coatings and Colourants (Toxic [6.7]) Group Standard 2006), and is classified as follows:

| Classes | Hazard Statements |
|---------|-----------------------------|
| 6.7B | Suspected of causing cancer |

SYMBOLS

WARNING



Other Classifications

There are no other Classifications that are known to apply.

Precautionary Statements

Read label before use.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
IF exposed or concerned: Get medical advice/ attention.
Store locked up.

3. Composition / Information on Ingredients

| Component | CAS/ Identification | Conc (%) |
|-------------------------|---------------------|----------|
| Modified Liquid Asphalt | 8052-42-4 | 3-4% |
| petroleum hydrocarbons | 68334-30-5 | 1-2% |
| aggregates | 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 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 facilities

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

Exposure

Swallowed

Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor if experiencing any symptoms. .

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

This product is non-irritating to skin. No further measures should be required.

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.

Suitable extinguishing substances:

Carbon dioxide, dry chemical, water spray. Do not direct water stream into burning material.

Unsuitable extinguishing substances:

Unknown.

Products of combustion:

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.

Protective equipment:

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

Hazchem code:

NA

6. Accidental Release Measures

Containment

There is no current legal requirement for containment of this product.

Emergency procedures

The nature and size of packaging will usually limit a large spill. In the event of spillage (>100kg) alert the fire brigade to location and give brief description of hazard.

Stop the source of the leak, if safe to do so.

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

Clear area of any unprotected personnel.

Contain using sand, earth or vermiculite.

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 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

Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation.

7. Storage & Handling

| | |
|-----------------|---|
| Storage | Avoid storage of harmful substances with food. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. 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. |

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 |
|-----------------------------------|--------------------------------------|--|------------------|
| | Modified Liquid Asphalt | 5mg/m ³ | data unavailable |
| | petroleum hydrocarbons | 100 ppm (white spirits) | data unavailable |
| | aggregates – see silica, crystalline | | data unavailable |
| | silica, crystalline: | 0.2mg/m ³ (quartz) 0.1mg/m ³ (cristobalite) | 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 | Protective eyewear is not normally necessary when using this product. However, it always prudent to use protective eyewear if splashes are likely. |
| Skin | 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. |
| Respiratory | A respirator when airborne concentrations approach the WES (section 8). Use a respirator with an organic vapour cartridge. 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 | solid and liquid asphalt mix, black, tarry appearance |
| Odour | petroleum odour |
| pH | no data |
| Vapour pressure | no data |
| Viscosity | NA - solid |
| Boiling point | 145-375°C |
| Volatile materials | ~1% |
| Freezing / melting point | no data |
| Solubility | insoluble in water |
| Specific gravity / density | no data |
| Flash point | 177°C (Cleveland open cup) |
| 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 | Strong oxidising materials |
| Substance Specific Incompatibility | none known |
| Hazardous decomposition products | Oxides of carbon, aldehydes, oxides of sulphur, oxides of nitrogen. |
| Hazardous reactions | none known |

11. Toxicological Information

Summary

IF SWALLOWED: Unlikely form of exposure due to the nature of the product. No ingredient is classed as acutely toxic.
 IF IN EYES: may cause irritation.
 IF ON SKIN: May cause irritation, may cause defatting and dermatitis of the skin.
 IF INHALED: May cause irritation of the respiratory system.
 CHRONIC: Repeated or prolonged exposure may cause liver or kidney damage. Contains petroleum hydrocarbon which are suspected of causing cancer.

Supporting Data

| | | |
|----------------|--|--|
| Acute | Oral | Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (oral, rat) for the mixture is >5,000 mg/kg. Data considered includes: petroleum hydrocarbons 7600mg/kg (rat). |
| | Dermal | Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (dermal, rat) for the mixture is >5000 mg/kg. Data considered includes: petroleum hydrocarbons >4300mg/kg (rabbit). |
| | Inhaled | Using LC ₅₀ 's for ingredients, the calculated LC ₅₀ (inhalation, rat) for the mixture is >5,000 ppm. Data considered includes: petroleum hydrocarbons 4.1mg/L (4h, dust/mist, rat). |
| | Eye | The mixture is not considered to be an eye irritant. |
| | Skin | The mixture is not 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 | The mixture is considered to be a suspected carcinogen. This substance contains petroleum hydrocarbons which are classed by EPA as 6.7B. This substance does contain aggregates which contain silica. Respirable crystalline silica is a known carcinogen. This substance is a solid, unlikely to form respirable dusts. |
| | Reproductive / Developmental | No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation. |
| | Systemic Aggravation of existing conditions | No ingredient present at concentrations > 1% is considered a target organ toxicant. None known. |

12. Ecological Data

Summary

This mixture is not considered harmful or ecotoxic.

Supporting Data

| | |
|------------------------------------|---|
| Aquatic | Petroleum hydrocarbons are classed by EPA as 9.1B. Using summation method this mixture does not trigger classification. |
| Bioaccumulation | No evidence of bioaccumulation |
| Degradability | Expected to be rapidly degradable. |
| Soil | No evidence of soil toxicity. |
| Terrestrial vertebrate | Not considered to be toxic towards terrestrial vertebrates |
| Terrestrial invertebrate | No evidence of toxicity towards terrestrial invertebrates. |
| Biocidal | no data |
| Environmental effect levels | No EELs are available for this mixture or ingredients |

13. Disposal Considerations

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|-------------------------------|---|
| Restrictions | There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents. |
| Disposal method | Dispose of residue and solutions that cannot be reused to sewer. If this is not possible dilute with water (at least 5 times as much water) and drain. |
| 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: HSR002679, Surface Coatings and Colourants (Toxic [6.7]) 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 > <i>any quantity</i> . |
| 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 |
| Bunding & 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 HSR002679, Surface Coatings and Colourants (Toxic [6.7]) 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 2013, published by WorkSafe and available on their web site – www.worksafe.govt.nz . |
| Other References: | Suppliers SDS |

Review

| Date | Reason for review |
|--------------|--------------------------|
| October 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.

