



Material Safety Data Sheet

Multithane Std

Polyurethane Waterproofing Membrane for Non-Exposed Areas

No: Multithane UV
Issue Date: 31 May 2010
Issued By: Duram
Valid To: 31 May 2015

Hazardous According to the criteria of NOHSC Australia

1. Identification of Material And Supplier

| | |
|--------------------------|---|
| Product Name | Multithane Std |
| Product Code | Duram Multithane UV, or Multithane |
| Company Name | Duram Industries Pty Ltd 51 Prince William Drive Seven Hills NSW 2147 |
| Address | 51 Prince William Drive, Seven Hills NSW 2147 |
| Emergency Tel | Australian Poisons Information Centre: 131 126 |
| Telephone | 02 9624-4077 |
| Fax | 02 9624-4079 |
| Emergency Contact | Australian Poisons Information Centre: 131 126 |
| Address | Duram Industries Pty Ltd 51 Prince William Drive Seven Hills NSW 2147 |
| 24 hrs Contact | |
| Other Information | This MSDS summarises to the best of our knowledge the health and safety hazard information of the product and how to safely handle and use the product in the work place. |

2. Hazards Identification

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| Hazardous Classification | Hazardous Substance, Dangerous goods Australia: This material is hazardous according to health criteria of ASCC. Hazardous Catagory Xn Harmful Xi Irritant Class: 6.1 Toxic Poison Schedule: S5 (Australia). |
| | Classified as a Dangerous Good for tansport by Road and Rail. |
| Risk Phrase(s) | Harmful by inhalation.Irritating to eyes. respiratory system and skin. Possible risk of irriversible effects. May cause senitisation by inhalation and skin contact. |

3. Composition/Information of Ingredients

Chemical Characterisation

| Ingredients | Name | CAS | Proportion | Risk |
|-------------|------------------------------|-----------|------------|------|
| | Urethane Prepolymer | 9048-51-1 | 30 to 60% | |
| | Inert Fillers | Not Known | 10% to 30% | |
| | Xylene | 1330-20-7 | < 30% | |
| | UV Stabilisers, UV Absorbers | Not Known | < 5% | |

4. First Aid Measures

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| Inhalation | Remove patient from exposure. Remove contaminated clothing. Keep patient warm and comfortable. Keep at rest until fully recovered. Ensure airways are clear. If breathing is laboured or cyanotic (blue), have a qualified person give oxygen through face mask. If breathing stopped give immediate artificail respiration and apply external cardiac massage. Seek immediate medical advice. |
| Ingestion | Rinse mouth with water. Give water to drink. Do NOT induce vomiting. Seel immediate medical attention. |
| Skin | Promptly wash with soap and water. Remove contaminated clothing and wash before re-use. If swelling, redness, blistering or skin irritation occures/ persists then seek medical advice. |
| Eye | Immediately irrigate with copious quantity of clean water for at least 15 minutes. Hold eyelid open to flush product from under lid. Seek immediate medical assistance. |

Advice to Doctor

Treat symptomatically. Effects may be delayed. If patient has been subject to severe exposure then the patient should be kept under medical supervision for at least 48 hours.

5. Fire Fighting Measures

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| Fire Fighting Measures | Product is flammable. Product contains flammable solvents. Containers may rupture / explode if subjected to high intensity heat. Keep containers cool with water spray to prevent expansion and possible rupture. If safe to do so, remove containers away from heat source or fire. Burning may product a dense and irritation smoke or fumes. Fire fighters should wear self-contained breathing apparatus if there risk of exposure to burning product. |
| Special Protective Equipment for Fire Fighters | Self contained breathing apparatus should be used. Full protective gear should be worn. |
| Specific Hazards | Combustible / flammable liquid. Combustion products may include carbon oxides (CO, CO ₂) nitrogen oxides (NO, NO ₂), isocyanate vapours, hydrocarbon vapours and HCN with emissions of toxic vapour, fumes and smoke. Due to reaction with water producing CO ₂ , a hazardous build up of pressure could result leading to possible rupture if containers are re-sealed |
| Unsuitable | |
| Extinguishing Media | Foam, dry agent (carbon dioxide, dry chemical powder). Water fog or if unavailable fine water spray may be used if no other medium is available, and then copius quantities. Reaction between water and hot isocyanate may be vigorous. |

6. Accidental Release Measures

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| Spills & Disposal | Major Spill: <ul style="list-style-type: none"> • Clear area of personell. • Cleaners should wear protective gear including fask mask or goggles, saftey boots, gloves and overalls. • Note: Product is viscous and should therefore spill should be able to be confinned. • Prevent product from entering drains and waterways. Product will cure in water to a rubber0like consistency. • Cover and contain with soil, sand or absorbent material. • Shovel in to open drums. Allow product to cure before closing. • Dipsoe of cured product in to land-fill. Minor Spill <ul style="list-style-type: none"> • Follow above procedure. |
| Personal Precautions | This information assumes a large spill: Clear area. Wear full protective gear to prevent skin and eye conatct and inhalation of vapours. Prevent run off from enetering water ways and drains. Cover with wet soil or wet sand. Let material react for 10 minutes. Shovel in to open containers. Was area with water. Allow residue to react. Provide good ventilation. |
| Environmental Precautions | Solvents will evaporate out of the product. The product will naturally cure on contact with air and will cure quicker on contact with water to a solid rubber-like consistency and become mostly inert. |

7. Handling and Storage

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| Precations for Safe Handling | Avoid contact with skin and eye and inhalation of vapours. |
| Conditions for Safe Storage | Store in cool, dry area away from water, alcohols, amines, acids, alkalis, corrosive chemicals, heat sources and foodstuffs. Keep dry. Products reacts with water and can lead to container rupture. Recommedned storage temperature range 15 to 35C. Do not in contact with aluminium or galvanised steel. Check regularly for leaks. Unsuitable containers are: aluminium, copper, copper alloy and galvanised metals. Classified: Dangerous Good Class - 6.1. Poison Schedule: S5. |
| Storage Temperature | 15°C to 35°C |

8. Exposure Controls/Personal Protection

Exposure Controls, Personal Protection

National Exposure Standards

No specific value has been assigned by the National Occupational Health and Safety for this product.

Engineering Controls

Ensure ventilation is adequate to keep air concentrations below Exposure Standards. Vapours are heavier than air and may collect in low lying areas. Do not enter confined areas where vapours may have collected. Keep containers closed when not in use. Keep away all sources of ignition.

Respiratory Protection

Product is generally rolled and hence product is not atomised. Therefore, use in well ventilated areas should suffice. However, face shield or air mask with positive air flow should be used in areas where ventilation is inadequate.

Eye Protection

Face shield or goggles.

Hand Protection

Neoprene, Nitrile & PVC gloves (long).

Footwear

Boots or safety foot wear.

Body Protection

Coveralls.

Hygiene Measures

Observe common sense and good industrial practices.

9. Physical and Chemical Properties

Form

Thick liquid, normally grey in colour.

Appearance

Thick liquid, normally grey in colour.

Odour

Solvent odour.

Melting Point

Not Available.

Boiling Point

Approximately 300°C.

Specific Gravity

Approx. 1.2

pH Value

Not Available

Vapour Pressure

Not Available. Relative air density(air = 1) > 1.

Flash Point

Approximately 28°C (as for Xylene)

Flammable Limits

Not Available

Kinematic Viscosity

Not Available.

Other Information

Insoluble in water. Soluble in most organic compounds.

10. Stability and Reactivity

Stability and Reactivity

Stable at room temperature.

Hazards

Avoid high temperatures.

Decomposition Products

Carbon oxides, nitrogen oxides, isocyanate vapours and hydrogen cyanide.

Hazardous Reactions

Will react exothermically with water and all organic compounds containing active hydrogen groups. Reactions with water and hot isocyanate may be vigorous.

11. Toxicological Information

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| Toxicological Information | No adverse effects expected if handled in accordance with this Safety Data Sheet. Acute Toxicity No LD50 data available. Industrial experience in humans has not shown any links between MDI exposure and cancer development. |
| Inhalation | Accute Inhalation: A respiratory irritant and possible respiratory sensitiser. Repeated or prolonged inhalation of vapour at levels above the occupational exposure standard colud cause respiratory sensitisation. Symptoms may include - irritaion of eyes, nose, throat and lungs, possibly with dryness of throat, tightness of chest and difficulty breathing. Onset of respiratory symptoms may be delayed for several hours after exposure. A hyper-recative response may develop to even minimal concentrations of MDI in sensitive persons. Inhalation of high concentrations will lead to anaesthetic effects and adverse effects on the central nervous system. Symptoms may include ligh-headedness, nausea, vomiting and headache. Inhalations of very high concentrations, which is unlikely as the product is usually rolled (and not atomised) can result in loss of consciousness and irregular heartbeat and prove sudenly fatal. |
| Ingestion | Accute Ingestion: This is highly unlikely as the product is a thick viscous liquid and would be difficlut to swallow. May produce nausea, vomiting, diarrhoea an can lead to drowsiness and possible lack of consciousness. |
| Skin | Moderate irritation. A skin sensitiser. Prolonged contact can lead to allergic dermatitis. Animal tests have shown that respiratoty sensitisation can be induced by skin contact with known sensitisers including diisocyanates. Hence the need for protective clothing and gloves. |
| Eye | Both liquid and vapour are irritants. |

12. Ecological Information

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| Environmental | Avoid contaminating water ways. For MDI, a pond study showed gross contamination caused no significant toxic effects on a wide range of flora. |
| Protection | |
| Other | |

13. Disposal Considerations

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| Disposal Consideration | Refer to State Land WasteAuthority. Empty containers must be de-contaminated. |
| Container Disposal | Allow residue product to cure, thne dispose to land-fill. |

14. Transport Information

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| Transportation Information | Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road & rail, IMDG for marine and IATA for air. UN No.: 2810 Class: 6.1 Toxic Packing Group: 111 Hazchem: 2X |
| Storage and Transport | Keep apart from explosives (Class 1), heat, sources of ignition, water, food and food packaging. Store in cool dry areas. |

15. Regulatory Information

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| Poisons Schedule | Australia: Poisons Schedule S5. |
| AICS (Australia) | |

16. Other Information

Other Information

Conditions of Use and Disclaimer

The information contained in this Material Data Sheet is given in good faith based upon our current knowledge and does not imply warranty, express or implied. The information is provided and the product is sold on the basis that the product is used for its intended purpose and is used in a proper workmanlike manner in accordance with the instructions of the Product Data Sheet in suitable and safe working conditions. Under no circumstances will the Company be liable for loss, consequential or otherwise, arising from the use of the product.

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QUEENSLAND: Unit 4, 29 Collinsvale St Rocklea, QLD 4106

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