

NORTHERN PLASTICS LTD.

MATERIAL SAFETY DATA SHEET

(REVISED June 21, 2019)

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|---|---|
| IDENTIFY (As Used on Label and List) POLYURETHANE ELASTOMER | Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that. |
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Section I

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| Manufacturer's Name NORTHERN PLASTICS LTD. | Emergency Telephone Number 1-613-996-6666 CALL COLLECT |
| Address (Number, Street, City, Prov. and Postal Code) 5840 AUTO ROAD SE | Telephone Number for Information 1-250-832-9452 |
| SALMON ARM, BC | Date Prepared Revised June 21, 2019 |
| CANADA V1E 2X2 | Signature of Preparer (optional) |

Section II - Hazardous Ingredients/Identity Information

| Hazardous Components (Specific Chemical Identity; Common Names(s)) | OSHA PEL | ACGIH TLV | Other Limits Recommended | % (optional) |
|--|----------|-----------|--------------------------|--------------|
| NOT APPLICABLE | | | | |
| POLYURETHANE ELASTOMERS ARE FULLY REACTED POLYMERS | | | | |
| FORMING ARTICLES WHICH ARE NOT CONSIDERED HAZARDOUS | | | | |
| UNDER OSHA'S CRITERIA IN 29CFR1910.1200 | | | | |

Section III - Physical/Chemical Characteristics

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|---------------------------------------|-----|---|-----------|
| Boiling Point | N/A | Specific Gravity (H ₂ O = 1) | 1.05-1.26 |
| Vapor Pressure (mm Hg.) | N/A | Melting Point - Melts 380°F - 450°F Will degrade above 300°F (150°C) | N/A |
| Vapor Density (AIR = 1) | N/A | Evaporation Rate (Butyl Acetate = 1) | N/A |
| Solubility in Water INSOLUBLE | | | |
| Appearance and Odor SOLID, NO ODOR | | | |

Section IV - Fire and Explosion Hazard Data

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|--|-------------------------|------------|---------------------|
| Flash Point (Method Used) N/A | Flammable Limits N/A | LEL N/A | UEL N/A |
| Extinguishing Media WATER, DRY CHEMICAL, FOAM OR CARBON DIOXIDE | | | |
| Special Fire Fighting Procedures: EVACUATE NON-EMERGENCY PERSONNEL TO A SAFE AREA. FIREFIGHTERS SHOULD USE SELF-CONTAINED BREATHING APPARATUS. AVOID BREATHING SMOKE, FUMES, AND DECOMPOSITION PRODUCTS. USE WATER SPRAY TO DRENCH SMOLDERING ELASTOMER. PRODUCT MAY MELT, AFTER IGNITION, TO FORM FLAMMABLE LIQUIDS. BURNING PRODUCES INTENSE HEAT, DENSE SMOKE, AND TOXIC GASES, SUCH AS CARBON MONOXIDE, OXIDES OF NITROGEN AND TRACES OF HYDROGEN CYANIDE. | | | |
| Unusual Fire and Explosion Hazards NONE | | | |
| Stability | Unstable | | Conditions to avoid |
| | Stable | X | NONE |
| Incompatibility (Materials to Avoid) STRONG ACIDS OR BASES | | | |
| Hazardous Decomposition or Byproducts: DECOMPOSITION THROUGH BURNING FUMES CONSISTING OF ORGANIC PARTICULATES, GASEOUS HYDROCARBONS, CARBON DIOXIDE, CARBON MONOXIDE AND MAY CONTAIN TRACES OF TOLUENE DIISOCYANATE OR DIPHENYLMETHANE DIISOCYANATE, HYDROGEN CYANIDE, ACROLEIN AND OXIDES OF NITROGEN. | | | |
| Hazardous Polymerization | May Occur | | Conditions to avoid |
| | Will Not Occur | X | |

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Section V - Reactivity Data

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|---|------------------------|----------|-------------------------------------|
| STABILITY | UNSTABLE: | | CONDITIONS TO AVOID: None |
| | STABLE: | X | |
| INCOMPATIBILITY (MATERIALS TO AVOID): Strong Acids or Bases | | | |
| HAZARDOUS DECOMPOSITION OF BYPRODUCTS: Decomposition through burning produces fumes consisting of organic particulates, gaseous hydrocarbons, carbon dioxide, carbon monoxide and may contain traces of toluene diisocyanate or diphenylmethane diisocyanate, nitrogen dioxide, hydrogen cyanide and acrolein. | | | |
| HAZARDOUS POLYMERIZATION | MAY OCCUR: | | CONDITIONS TO AVOID: NONE |
| | WILL NOT OCCUR: | X | |

Section VI - Health Hazard Data

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| Route(s) of Entry: expected | Inhalation?: Yes, primary route | Skin?: No | Ingestion?: No toxic effects are expected |
| INHALATION OF DUST DURING MACHINING AND INHALATION OF VAPORS DURING HOT WIRE CUTTING OR BRANDING. | | | |
| Health Hazards (Acute and Chronic): ACUTE: NONE KNOWN FROM SOLID ARTICLE. FUMES FROM HOT WIRE CUTTING CAN BE IRRITATING AND LEAD TO COUGHING. THESE FUMES COULD CONTAIN TRACES OF ISOCYANATES (MDI OR TDI) DEPENDING UPON WHICH ISOCYANATE IS USED IN THE ELASTOMER FORMULATION. CHRONIC: ANIMAL STUDIES INDICATE THAT CHRONIC INHALATION OR OVEREXPOSURE OF DUSTS MAY COUSE INFLAMMATION OF THE LUNGS, FINROSIS, AND AIRWAY OBSTRUCTION. | | | |
| Carcinogenicity: CURED POLYURETHANE IS NOT LISTED AS A CARCINOGEN | NTP?: No | IARC Monographs?: No | OSHA Regulated?: No |
| Signs and Symptoms of Exposure: SEE ACUTE AND CHRONIC EFFECTS | | | |
| Medical Conditions: DUST FROM GRINDING OPERATIONS MAY AGGRAVATE EXISTING LUNG DISORDERS WHEN PROPER PROTECTION IS NOT USED. GENERALLY AGGRAVATED BY EXPOSURE. | | | |
| Emergency and First Aid Procedures: FLUSH EYES WITH WATER IF DUST FROM GRINDING CAUSES IRRITATION. | | | |

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Section VII - Precautions for Safe Handling and Use

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| Steps to Be Taken in Case Material is Released or Spilled PICK UP AND HANDLE AS ANY OTHER INERT SOLID MATERIAL |
| Waste Disposal Method: NOT CONSIDERED A HAZARDOUS MATERIAL. DISPOSE OF MATERIAL ACCORDING TO ANY LOCAL, STATE AND FEDERAL REGULATIONS. |
| Precautions to Be Taken in Handling and Storage: STORE ELASTOMER IN AREAS EQUIPPED WITH SPRINKLER SYSTEMS. STORE AWAY FROM SPARKS, FLAMES OR OTHER IGNITION SOURCES. |
| Other Precautions: CUTTING ELASTOMER BY HOT WIRE OR HOT BRANDING CAN FORM DECOMPOSITION PRODUCTS. LOCAL EXHAUST VENTILATION SHOULD BE USED TO REMOVE ANY FUMES. IF ISOCYANATES ARE EMITTED, VENTILATION SHOULD BE SUFFICIENT TO INSURE LEVELS BELOW THE TLV FOR TDI (0.005 PPM TWA/0.02 PP, STEL) OR MDI (0.02 PPM CEILING) ALSO SEE RESPIRATORY PROTECTION BELOW. |

Section VIII - Control Measures

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| Respiratory Protection (Specify Type): FOR GRINDING - WEAR A DUST MASK. IF GENERATING FUMES FROM HOT WIRE OR HOT KNIFE OPERATION - WEAR AN AIR-PURIFYING RESPIRATOR WITH ORGANIC CARTRIDGE, IF VENTILATION IS INADEQUATE. | | |
| Ventilation | Local Exhaust: AS REQUIRED TO REDUCE DUST AND FUME EXPOSURE BELOW OSHA LEVELS Mechanical (General): SEE LOCAL EXHAUSER | Special: NONE Other: NONE |
| Protective Gloves: NONE REQUIRED | Eye Protection: NONE REQUIRED IN NORMAL USE. FOR GRINDING OPERATIONS, USE GRINDING GOGGLES. | |
| Other Protective Clothing or Equipment: NONE REQUIRED | | |
| Work/Hygienic Practices: NONE REQUIRED | | |