

MATERIAL SAFETY DATA SHEET



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SECTION I -- PRODUCT INFORMATION

Product Name: AcrylaThane 5200
Component : A
Product Code: 02-Q500 to Q799
Product Description: 1:4, Aliphatic, Acrylic, High Solids, Spray
Supplier: Madison Chemical Industries Inc., 490 McGeachie Drive, Milton, Ontario, Canada L9T 3Y5 Phone: (905)878-8863
Product Use: Corrosion Coating

SECTION II -- HAZARDOUS INGREDIENTS

| Hazardous Ingredients | CAS No. | % | Exposure Level | LD ₅₀ (oral-rat) | LD ₅₀ (derm-rabbit) | LC ₅₀ , Route, Species |
|----------------------------|------------|---------|----------------------------------|-----------------------------|--------------------------------|--------------------------------------|
| Homopolymer of HDI | 28182-81-2 | 60-100 | 0.5 mg/m ³ | > 5000 mg/kg | > 5000 mg/kg | 390-453 mg/ m ³ 4hr rat |
| Hexamethylene Diisocyanate | 822-06-0 | 0.1-1.0 | 0.005 ppm (TWA) | 710 mg/kg | 570 mg/kg | 310-350 mg/m ³ 1-4h (rat) |
| Methly Amyl Ketone | 110-43-0 | 7-13 | 50 ppm (TWA) | 730 mg/kg | 10300mg/kg (skin) | 4000 ppm (inhalation) |
| Xylene | 1330-20-7 | 3-7 | 100 ppm / 435 mg/ m ³ | 4300 mg/kg | Not available | 5000ppm 4h inhalation rat |
| n-Butyl Acetate | 123-86-4 | 3-7 | 150ppm/ 710 mg/ m ³ | 14000mg/kg | Not available | 2000ppm 4h inhalation rat |
| Ethylenzene | 100-41-4 | 0.5-1.5 | 100 ppm | 3500 mg/kg | Not available | 4000 ppm 4h inhalation |

SECTION III -- PHYSICAL DATA

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|---------------------------------------|--|------------------------------|-----------------------------------|
| Physical State: | Liquid | Odour and Appearance: | Clear/pale liquid, very low odour |
| Odour Threshold: | Xylene 0.3 ppm, Butyl Acetate 7-20 ppm MAK 0.18-0.2 ppm | Specific Gravity: | 1.00-1.10 @ 25°C |
| Vapour Pressure: | 7.5E-5 mmHg @ 25°C | Vapour Density: | Not available |
| Evaporation Rate: | Not available | Boiling Point: | Not available |
| Freezing Point: | Not available | pH: | Not available |
| Coeff. Oil/Water Distribution: | Not available | | |

SECTION IV -- FIRE OR EXPLOSION HAZARD

Flammable Conditions:

Avoid Sparks and open flames

Provide positive ventilation

In case of fire - Use Self-Contained Breathing Apparatus

Decomposition and Combustion products may be toxic

Flash Point (°C): > 40°C (104 °F)(SetaFlash Closed Cup)

Sensitivity - Impact: None

- Static: Sensitive. Airless spray equipment should be grounded

Autoignition Temperature: Not available

Extinguishing Media: Carbon dioxide, dry chemical, foam, halogenated agents. If water is used, use very large quantities. The reaction between the hot product and water may be vigorous.

Flammability Limits: LEL - Not applicable UEL - Not applicable

Hazardous Combustion Products: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides, HDI, HCN, Hydrocarbons

SECTION V -- REACTIVITY DATA

Chemical Stability: Stable, Polymerization may occur with water or high temperatures

Reactive Conditions: Elevated temperatures, Incompatibles

Incompatible Materials: Water, Amines, Strong bases, Alcohols, Acids, Strong Oxidizing Agents.

Hazardous Decomposition Products: Not Available

SECTION VI -- TOXICOLOGICAL PROPERTIES

Effects of over-exposure: **Inhalation:** inhalation of vapor or aerosol at levels above occupational exposure limit could cause respiratory sensitization and lung injury. Symptoms may include irritation to the nose, throat, lungs and eyes possibly combined with dryness of the throat, tightness of chest and difficulty in breathing and/or flu-like symptoms. **Skin Contact:** moderate irritant. Repeated and/or prolonged contact may cause skin sensitization. **Eye Contact:** the aerosol, vapor or liquid will irritate human eyes following contact. **Ingestion:** may cause irritation of the gastrointestinal tract. **Chronic Effects:** There are reports that excessive chronic exposure to diisocyanates may result in a permanent decrease in lung function.

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| Exposure Limits: | HDI: 0.005 ppm (ACGIH), 0.034 mg/m ³ (TWA), 0.02 ppm (Ceiling), also see section II | Sensitization: | Possible through repeated over-exposure. |
| Carcinogenicity: | None known | Reproductive Toxicity: | None known |
| Teratogenicity: | Contains xylene which has caused health effects in the developing embryo/fetus in animal studies; no effect known in humans | Mutagenicity: | None known |
| Synergistic Products: | None known | | |

SECTION VII -- PREVENTATIVE MEASURES

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| Respiratory: | With this product, there is a low likelihood that, when used in a well ventilated work area, the concentration of hazardous substances will exceed applicable threshold. In such cases, a NIOSH-approved half mask (nose and mouth) cartridge respirator equipped with organic vapour cartridge (OV) and particulate filters (N95) is acceptable. In poorly ventilated areas, or where a sudden release of product may occur (e.g. significant spillage), use an approved NIOSH-MSHA positive pressure, air supply respirator equipped with a full face piece, or an air-supplied hood. In all cases, follow respirator manufacturer's directions for use and establish a system of periodic maintenance (ref. OSHA guideline). |
| Ventilation: | In confined areas, positive (forced air) ventilation is recommended. In other indoor applications, passive ventilation (opening of doors and windows) is recommended. |
| Protective Clothing: | Dress as when working with oil-based paint. Clothing should cover all exposed areas of the body. The use of solvent resistant gloves and eye goggles (or full face shield) is recommended. |
| Handling and Storage: | Keep material away from extreme heat, sparks and open flames. Store in tightly closed containers and protect from moisture and foreign materials. Do not reseal contaminated containers. Ideal storage temperature 10 - 27°C (50 - 80°F). If containers are bulging, exercise caution when opening. |
| Spill Procedure: | Remove sources of ignition such as heat, sparks and flames. Dyke area to contain spill. Recover free liquid with explosion-proof pumps. Cover the spill with an absorbent material such as sand or seeping compound. Put material into closable containers. Flush contaminated areas with decontamination solution (0.5% liquid detergent, 3-8% concentrated ammonium hydroxide in water). |
| Waste Disposal: | Dispose in accordance with Federal, Provincial and local regulations |
| Shipping Information: | Coating Solution UN 1139, Class 3, III |

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| WHMIS Classification: | B3, D2A | HMIS Information: | Health: 3 |
| | | | Flammability: 2 |
| | | | Reactivity: 1 |

SECTION VIII -- FIRST AID

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| Skin: | Wash thoroughly with soap and water. Remove contaminated clothing. |
| Eyes: | Immediately flush with water for at least 15 minutes. |
| Ingestion: | Do not induce vomiting. Guard against aspiration into the lungs by keeping victim's head below his/her hips if vomiting does occur. If conscious, give 1 or 2 glasses of water to dilute product. |
| Inhalation: | If nauseous or lightheaded, remove to fresh air, give oxygen if breathing is difficult. If breathing stopped, begin artificial respiration. In all cases get medical attention. |

SECTION IX -- PREPARATION OF MSDS

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| Date Prepared: | July 23, 2009 |
| Prepared by: | Research and Development Department Madison Chemical Industries Inc. |

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