

MATERIAL SAFETY DATA SHEET – FLEXIBLE RESIN

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Information

Product Name: Flexible Resin
Chemical Family: Isocyanate Prepolymer
Application: Chemical Grout
Supplier: Multiurethanes Ltd.
5245 Creekbank Road, Mississauga, ON L4W 1N3
Telephone: 905-564-7650
Fax: 905-564-7998
Emergency Contact: 1-800-663-6633

MSDS Preparation Information

Revision Date: July 21, 2011
Prepared By: Multiurethanes Ltd, Mississauga, ON L4W 1N3
Telephone: 905-564-7650

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration
Diphenylmethane Diisocyanate (MDI)	26447-40-5	< 10%
Diphenylmethane Diisocyanate (HP)	39310-05-9	< 3%
Triethyl Phosphate	78-40-0	< 0.2%
Dibutylmaleate	105-76-0	< 45 %

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview Ingredient

Light yellow liquid; sweet odour; hazardous

Potential Health Effects

Eye Contact: Irritation
Skin Contact: Irritation
Inhalation (acute): Irritation
Inhalation (chronic): Sensitization
Ingestion: May be poisonous

SECTION 4: FIRST AID MEASURES

Eye Contact:	Flush with water; if irritation occurs seek medical attention
Skin Contact:	Wash with soap and water; if irritation occurs, seek medical attention
Inhalation:	Move to fresh air; if difficult breathing occurs, seek medical attention
Ingestion:	Seek medical attention; drink water; do not induce vomiting

SECTION 5: FIRE FIGHTING MEASURES

Flash Point:	199°C
Extinguishing Media:	Dry chemical; carbon dioxide; foam; water spray
Special Fire Fighting Instructions:	Wear full protective equipment, including SCBA; keep containers cool with water spray

SECTION 6: ACCIDENTAL RELEASE MEASURES

General:	Use conventional absorbents
Waste Disposal:	Do not seal containers; dispose according to local regulations

SECTION 7: HANDLING AND STORAGE

Storage:	Store in a dry location
Handling:	Handle with care

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls

Engineering Controls:	Use mechanical ventilation; do not spray; beware of pressure build-up in closed containers
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Personal Protective Equipment (PPE)

Eye/Face Protection:	Safety glasses with side shields; emergency eye-wash kits readily available; face shield for high-pressure spray hazards
Skin Protection:	Impermeable gloves; protective clothing with long sleeves and long pants
Respiratory Protection:	Not required for typical applications

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Liquid
Appearance:	Yellow liquid
Colour:	Yellow
Odour:	Sweet
Boiling Point:	209°C
Melting/Freezing Point:	< 0°C
Solubility in Water:	Soluble, reacts with water to emit carbon dioxide
Specific Gravity:	1.069 at 25°C
Bulk Density:	1.069 g/ml
% Volatiles by Volume:	Not determined
pH:	Not determined
Vapour Pressure:	Less than 1×10^{-5} mm/Hg at 25°C
Vapour Density:	8.5 (MDI) (Air =1)

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable
Hazardous Polymerization:	May occur following contact with moisture, other materials that react with isocyanates, or temperatures above 204°C
Incompatibles:	Avoid contact with water, amines, strong alkalis, alcohols
Decomposition Product:	Burning may produce oxides of nitrogen, carbon monoxide traces of hydrogen cyanide, MDI vapours or aerosols.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity

Oral LD50:	>10,000 mg/kg in rats
Dermal LD50:	>5,000 mg/kg in rabbits
Inhalation LC50:	Not determined
Eye Effects:	Irritation
Skin Effects:	Prolonged exposure may cause sensitization
Sensitization:	Chronic inhalation may cause sensitization
Chronic toxicity:	Not determined
Carcinogenicity:	Not determined
Mutagenicity:	Not determined

SECTION 12: ECOLOGICAL INFORMATION

Evidence of aquatic toxicity. Avoid environmental contamination.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose according to local regulations.

SECTION 14: TRANSPORTATION AND SHIPPING INFORMATION

Not regulated.

SECTION 15: REGULATORY INFORMATION

OSHA status:	Hazardous; irritant
TSCA status:	Components are listed on TSCA Inventory
CERCLA reportable quantity:	Not applicable for typical product application
SARA Title III Section 302:	Extremely hazardous substances - no known reportable constituents
SARA Title III Section 311/312:	Hazard categories- acute health hazard; chronic health hazard
SARA Title III Section 313:	Toxic Chemical Release Reporting - not applicable
RCRA status:	It is the responsibility of the product user to determine, at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

SECTION 16: OTHER INFORMATION

WHMIS (Workplace Hazardous Material Identification System) Rating:

Class D2B - Toxic Material

NFPA (National Fire Protection Agency) Rating:

Health	Flammability	Reactivity	Other
2	1	1	0

NAERG (North American Emergency Response Guide) Rating:

156

End of MSDS