

MATERIAL SAFETY DATA SHEET – UNIVERSAL RESIN

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Information

Product Name: Universal 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
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SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration
Diisobutyl Phthalate	84-69-5	< 50%
4,4' Diphenylmethane Diisocyanate	101-68-8	< 21%
Higher Oligomers of MDI	9016-87-9	< 25%
Diphenylmethane Diisocyanate	26447-40-5	< 5%

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview Ingredient

Brown liquid; musty odour; hazardous

Potential Health Effects

Eye Contact: Mild irritation
Skin Contact: Irritation
Inhalation (acute): Irritation
Inhalation (chronic): Sensitization; may damage lungs
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:	185°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:	Brown liquid
Colour:	Brown
Odour:	Musty
Boiling Point:	327°C
Melting/Freezing Point:	Below 0°C
Solubility in Water:	Insoluble, slow reaction with water to emit carbon dioxide
Specific Gravity:	1.14 - 1.18 at 25°C
Bulk Density:	1.14 g/ml
% Volatiles by Volume:	Negligible
pH:	Not determined
Vapour Pressure:	Less than 1×10^{-5} mm/Hg at 25°C for MDI
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 expected to be carcinogenic
Mutagenicity:	Not expected to be mutagenic

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
3	1	1	0

NAERG (North American Emergency Response Guide) Rating:

156

End of MSDS