

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Wrapsulate Part A
Chemical Name: Polymeric MDI
Manufacturer: Elastochem Specialty Chemicals Inc.
37 Easton Road
Brantford, Ontario N3P 1J4
Phone (519) 754-1678 Fax (519) 754-4487
Supplied by: Elastochem Specialty Chemicals Inc.
Emergency Telephone #: Chemtrec Emergency Number: 800-424-9300
Intended use of Product: Component of a Foam Insulation System

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient	% (w/w)	CAS #	Exposure Limit
Diphenylmethane diisocyanate (MDI)	1-5	026447-40-5	TWA 0.005PPM PEL 0.02PPM
Polymethylene polyphenyl isocyanate	40-55	009016-87-9	Not available
4'4'-Diphenyl methane diisocyanate	30-45	101-68-8	TWA 0.005 PPM PEL 0.02 PPM

Consult local authorities for acceptable exposure limits

Section 3: HAZARDS IDENTIFICATION

Routes of Exposure: Inhalation, skin contact, eye contact.

Acute Effects:

Eyes: May cause slight eye irritation

Skin: Prolonged or repeated exposure may cause skin irritation.

Ingestion: Toxicity is low for ingestion

Inhalation: Excessive exposure may cause irritation of the upper respiratory tract and lungs.

Chronic Effects: Chronic exposure to MDI may cause respiratory sensitization in susceptible individuals.

See toxicological information (section 11)

Section 4: FIRST AID MEASURES

Skin: Wash off well with soap and water, remove contaminated clothing, seek medical attention if irritation develops.

Eyes: Immediately flush thoroughly with water for at least 15 minutes. Get prompt medical attention.

Inhalation: Remove to fresh air; give artificial respiration if not breathing. Get medical attention.

Ingestion: Do not induce vomiting. If conscious, give victim 2 glasses of water. Never give anything to an unconscious person. Get medical attention immediately.

Section 5: FIRE FIGHTING MEASURES

Extinguishing Media: Use large amounts of water spray, foam, dry chemical, or CO₂. Water spray to cool fire-exposed containers.
Fire Fighting Procedures: Wear self-contained breathing apparatus. Cool exposed containers with water.
Special Procedures: None
Flash Point (°C): 199 °C
Lower Explosion Limit: Not available
Upper Explosion Limit: Not available
Auto Ignition Temperature: Not available
Hazardous Combustion Products: Oxides of carbon and nitrogen.
Sensitivity to mechanical impact: No
Sensitivity to static discharge: No

Section 6: ACCIDENTAL RELEASE MEASURES

Spill Procedure: Evacuate the area of all unnecessary personnel. Remove all sources of ignition. Ventilate area. Dike the spill to prevent entry into water system. Wear suitable protective equipment listed under preventative measures including respiratory protection.
Use inert absorbent material to clean up spill. Saturate spill with excess neutralizing solution (1% ammonia in water + 10% isopropanol). When reaction is complete shovel into drums.

Section 7: HANDLING AND STORAGE

Handling & Storage: Store at temperature of 16-38°C (60-100°F), away from heat and moisture. Store and handle in a well ventilated area. Wear all personal protective equipment when handling.
Special shipping Information: None

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTIONS

Personal Protection:
Respiratory Protection: Use in adequate ventilation. Spraying increases the risk of hazardous exposure. If material is sprayed, heated or exceeding the exposure limit workers should avoid contact with aerosols through proper engineering controls such as exhaust ventilation and proper protective equipment such as a full face air supplied respirators.
Skin Protection: Wear gloves, boots and long sleeves which are impervious to the material to prevent skin contact.
Eye protection: Chemical safety goggles or glasses with side shields.
Ventilation: Adequate ventilation to maintain levels below exposure guidelines.
Eye wash and safety equipment should be readily available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Odour: Slightly musty odour
Appearance: Brown liquid
Odour threshold: no data
Specific Gravity (H2O = 1): 1.2 @ 25°C
Freezing Point: <-10 °C
Viscosity: 250 cps @@ 25°C
Boiling Pt: 208°C
Vapor Pressure (mm Hg) . . .: 1 X 10⁻⁵ mm Hg@25°C
Percent Volatile by vol (%): Not applicable
Vapor Density (Air = 1) . . : 8.5 (MDI)
Evaporation Rate (BuAc = 1): Not available
Solubility in Water (%) . . : Not soluble, reacts slowly with water to liberate CO₂ gas

Section 10: STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature and normal processing conditions.
Conditions to avoid: High temperature, sparks and open flames.
Incompatibility (Materials to avoid): Water, amines, strong bases, alcohols, and metal compounds.
Hazardous Decomposition products: Thermal decomposition may produce MDI vapour and mist, traces of hydrogen cyanide and oxides of nitrogen and carbon.
Hazardous Polymerization: Polymerization Will not spontaneously occur under normal conditions. Avoid incompatible products below.

Section 11: TOXICOLOGICAL INFORMATION

LD50: oral-rat >10 000 mg/Kg
LD50: Dermal- rabbit >6 200 mg/Kg
Carcinogenicity: Not listed by IARC, NTP or regulated as a carcinogen by OSHA.
Teratogenicity/Reproductive effects: Not available
Mutagenicity: Not available
Name of toxicologically synergistic products: Not available

Section 12: ECOLOGICAL INFORMATION

Biodegradability: 0% Exposure Time: 28 days
Bioaccumulation: Rainbow trout. Exposure Time: 112 days, <BCF. Does not bioaccumulate.
Fish Toxicity: Zebra Fish, LC0: >1000mg/l, 96 hours.
Killifish, LC0: >3000mg/l, 96 hours.
Daphnia Magna, EC50: >1000mg/l, 24 hours

Section 13: DISPOSAL CONSIDERATIONS

Disposal Procedure:

Comply with Federal, provincial, and local regulations on reporting releases.

Consult your local or regional authorities.

Section 14: TRANSPORT INFORMATION

TDG (TRANSPORATION OF DANGEROUS GOODS) CLASSIFICATION: Not Regulated

Class: Not Regulated

Section 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION: D2A, D2B

Domestic Substance List (DSL): Yes

Section 16: OTHER INFORMATION

References: Canadian Guide of the Law and Regulations of the Transportation of Dangerous Goods. Controlled products regulations. Manufacturer's Material Safety Data Sheet. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Other special considerations: No additional remark

Regulatory Affairs Department: 519-754-1678

DATE: May 1, 2017

REVISION 1

PREPARED BY: Regulatory Affairs group,
Elastochem Specialty Chemicals Inc.