

SAFETY DATA SHEET

Quantum Technical Services Ltd.

Section 1. Product and Company Identification

Product Name **PRECIDIUM™ MTI Bus Membrane Resin**
PRECIDIUM™ brand name is a trademark of Quantum Chemical, and is being used with permission.

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Chemical Emergencies For 24-Hour Emergency call Canutec at 613.996.6666

Section 2. Hazards Identification

2.1 Classification

OSHA Regulatory Status: This material is considered hazardous by the 2012 OSHA Hazard Communication Standard (CFR 1910.1200).

WHMIS **D1B** Materials causing immediate and serious toxic effects – Toxic Material.
E Corrosive Material.

2.2 Label Elements:

Pictogram:



Signal Word:

Hazard Statements:

Warning

H301 Toxic if swallowed.
H312 Harmful in contact with skin.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H372 Causes damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
H290 May be corrosive to metals.

Precautionary Statements:

P264 Wash face, hands and any exposed skin thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P284 [In case of inadequate ventilation] wear respiratory protection. (NIOSH Approved, Organic Cartridge)
P273 Avoid release to the environment.

Response:	P314	Get medical advice/attention if you feel unwell.
P305 + P351 + P338 + P313		IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical advice/attention.
P302 + P350; P332 + P313		IF ON SKIN: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
P304 + P340		IF INHALED: Remove person to fresh air and keep comfortable for breathing.
S64/ P310 + P331		IF SWALLOWED: Rinse mouth with water (only if person is conscious). Immediately call a POISON CENTRE/doctor. Do NOT induce vomiting.
Storage:	P233	Keep container tightly closed.
Disposal:	P501	Dispose of contents/containers in accordance with local/regional/national/international regulations.

Section 3. Composition and Ingredient Information

Hazardous Ingredients	%	T.L.V.	C.A.S. #	LD/50,	Route, Species
Poly (oxy(methyl-1,2-Ethanediy)), alpha-(2-Aminomethylethyl)omega- (2-aminomethylethoxy) –diamine	>5	N/D	9046-10-0	480mg/Kg	oral, rat
Benzenediamine,ar,ar,-diethyl-ar-methyl-	>5		68479-98-1	738 mg/kg	oral,rat

Section 4. First Aid Measures

Eye Contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Obtain immediate medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of soap and water. Remove contaminated clothing. Wash clothing before reuse. Obtain immediate medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.
Ingestion	If ingested, rinse out mouth; dilute with water. Consult a physician. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Section 5. Fire Fighting Measures

Flash Point	>200° F
Extinguishing Media	Water fog. Use flooding amounts of water in early stages of fire.
Unusual hazards	Not applicable.
Sensitivity to Mechanical Impact	Not expected to be sensitive to mechanical impact.
Sensitivity to Static Discharge	Not expected to be sensitive to static discharge.
Special Fire Fighting Procedures	Cool fire-exposed containers with water spray. Heat will cause pressure buildup and may cause explosive rupture. Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

Section 6. Accidental Release Measures

Leak/Spill	Spills should be contained, solidified, and placed in suitable containers for disposal in a licensed facility. Wear respiratory protection and protective clothing. Provide adequate ventilation. This product is an alkaline. Before discharging sewage into treatment plants neutralization is generally required. It can be mechanically removed from water due to insolubility.
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Section 7. Handling and Storage

Handling Procedures	Avoid skin and eye contact. Avoid breathing fumes. Remove contaminated clothing before reuse. Maintain good personal hygiene.
Storage Needs	Store in a cool and dry place, for product integrity. Store in tightly sealed container and protect from moisture and foreign materials. Keep container closed when not in use.

Section 8. Exposure Controls and Personal Protection

Protective Equipment	
Eye/Type	Liquid chemical goggles. Contact lenses should not be worn.
Respiratory/Type	At least an air-purifying respirator equipped with an organic vapour cartridge and particulate pre-filters must be worn.
Gloves/Type	Rubber or plastic gloves. Butyl rubber gloves. Nitrile rubber; a barrier cream. Practice good hygiene; wash thoroughly before handling any food.
Clothing/Type	Wear adequate protective clothes.
Other/Type	Eyewash fountain. Emergency shower should be in close proximity.
Ventilation Requirements	Ventilate adequately.

Section 9. Physical and Chemical Properties

Physical State	Liquid.
Odor	Amine.
Specific Gravity	Approximately 1.1.
Odor Threshold(ppm)	Not applicable.
Vapor Pressure (mm Hg)	0.9 @ 234°C.
Vapor Density (Air=1)	>1.
Evaporation Rate	Non volatile.
Boiling Point	250°C.
pH	N/D.
Solubility in water	1%.
Freezing Point (° C)	-29°C.

Section 10. Stability and Reactivity

Incompatibility	Strong acid/bases, isocyanates and oxidizing agents.
Reactivity Conditions	See “incompatibility”.
Hazardous Products of Decomposition	Carbon Monoxide/ Dioxide. NOx.

Section 11. Toxicological Information

Poly (oxy(methyl-1,2-Ethanediy)), alpha-(2-Aminomethylethyl)omega- (2-aminomethylethoxy) –diamine	LD50 480mg/kg oral, rat
Benzenediamine,ar,ar,-diethyl-ar-methyl-	LD50 2090 mg/kg Dermal, rabbit
Irritancy of Material	LD50 738 mg/kg oral,rat
Sensitizing Capability of Material	Irritant.
Carcinogenity of Material	Not available.
Teratogenicity	Not classified as carcinogenic.
Mutanagenity	Not available.
Reproductive Effects	Not available.
Synergistic Materials	None known.

Section 12. Ecological Information

Aquatic Toxicity

Benzenediamine,ar,ar,-diethyl-ar-methyl

Freshwater Fish LC50 (48hr) 200 mg/l
 Freshwater Algae EC10/72 hr 54 mg/l
 Water Flea LC50 (48 hr) 0.5 mg/l

Poly (oxy(methyl-1,2-Ethanediy)), alpha-(2-Aminomethylethyl)omega- (2-aminomethylethoxy) –diamine

Fish Leuciscus idius LC50 (96 hr) >220 - <460 mg/l
 Daphnia Magna EC50 (48hr) 15 mg/l

Persistence/Degradability

Poorly Biodegradable .

Bioaccumulation

Accumulation in organisms is not expected.

Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. Do not release untreated into natural waters.

Section 13. Disposal Considerations

Waste Disposal

In accordance with municipal, provincial and federal regulations. Empty containers must be handled with care due to product residue. Do not heat or cut empty containers with electric or gas torch.

Section 14. Transport Information

T.D.G. Classification

Amine, liquid, corrosive, N.O.S., Class 8, UN2735, Packing Group III.

Section 15. Regulatory Information

Inventories	DSL (one component added at 0.003% is not listed on the DSL; we do not exceed the import limit for unlisted materials on this product). TSCA (all components are listed).
WHMIS Classification	Class D, Division 1, Subdivision B (Toxic), Class E (corrosive).

Section 16. Other Information

Revision Date:	August 15, 2017
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