



MATERIAL SAFETY DATA SHEET

PRODUCT: Q-Seal 295M Isocyanate

Prepared: 16 April 2009
Supersedes: 16 August 2006

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product: Q-Seal 295M Isocyanate
Chemical Family: Polyurethane prepolymer
Product Use: Loop detector sealant
Responsible Party: Chemque, Inc.
266 Humberline Drive
Rexdale, ON M9W 5X1
Telephone Number: (416) 679-5676
In Emergency Only: CANUTEC Collect: (613) 996-6666 (24-hour hotline)
Information: (613) 992-4624

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview: Dark amber, odourless liquid.
May cause eye, skin, and/or respiratory tract irritation.
Potential skin/respiratory sensitizer.

Potential Health Effects: Eyes – Irritant.
Skin – Irritant. Prolonged or repeated contact can lead to reddening, drying and blistering. Sensitizer.
Inhalation – Highly toxic by inhalation of isocyanate vapours. Sensitizer. Irritant.
Ingestion – May cause irritation of the gastrointestinal tract.
Chronic Effects – Prolonged or repeated inhalation of isocyanate vapours can cause lung damage. Heating of the product may release additional vapours.

SECTION 3: HAZARDOUS INGREDIENT INFORMATION

Ingredient	% (WW)	CAS Number
Di-(2-ethylhexyl) phthalate	10-30	117-81-7
Polymeric diphenylmethane diisocyanate	10-30	9016-87-9
Diphenylmethane-4,4'-diisocyanate	10-30	101-68-8

SECTION 4: FIRST AID MEASURES

Eyes: Flush eyes with water for 15 minutes. If irritation occurs, consult a physician.
Skin: Remove affected clothing. Wash skin with soap and water immediately. Wash contaminated clothing before re-use. Contact physician if irritation occurs.
Inhalation: Move to fresh air. Administer oxygen if necessary. Seek medical attention.
Ingestion: Do not induce vomiting. Give water or milk. Consult a physician.

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SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties: Isolate from heat, electrical equipment, sparks and open flame. Closed container may explode when exposed to extreme heat, or may burst if contaminated with moisture.

Extinguishing Media: CO₂, water spray, foam, dry chemical.

Protection of Fire Fighters: Self contained breathing apparatus and full protective clothing should be worn by fire fighters.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment as recommended in Section 8.

Environmental Precautions: Do not empty into drains or discharge into the soil/subsoil.

Methods for Containment: Cover spill with an inert absorbent material. Remove for disposal.

Methods for Clean-Up: Treat absorbent and spill area with solution of 90% water, 8% ammonia and 2% detergent.

SECTION 7: HANDLING AND STORAGE

General Warning to Prevent Exposure: Do not breathe fumes or vapours.
Avoid contact with eyes, skin, and clothing.
Wash thoroughly after handling.

General Storage Information: Store in tightly-sealed containers in a cool, dry area.
Keep away from moisture.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ingredient	Exposure Limit	Unit
Di-(2-ethylhexyl) phthalate	5 (TWA ACGIH)	mg/m ³
Polymeric diphenylmethane diisocyanate	0.05 (TLV ACGIH)	mg/m ³
Diphenylmethane-4,4'-diisocyanate	0.005 TLV (ACGIH)	ppm

Engineering Controls: Use local exhaust ventilation to keep vapour concentrations below TLV.

Personal Protective Equipment: Eyes: Safety glasses or goggles; face shield if risk of splashing is present.
Skin: Chemical resistant gloves.

Inhalation: For confined spaces, use a NIOSH-approved organic respirator if TLV is exceeded. For outdoor applications, no respirator is required.

Other: Safety shower, eye bath.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark amber liquid.
Odour: No distinctive odour.
Melting Point: N/E
Boiling Point: N/E
Flash Point: 203 C (397 F) (Component)
Evaporation Rate: N/E
Upper/Lower Flammable Limits: N/E
Vapour Pressure: N/E
Vapour Density: N/E
Specific Gravity @ 25 C: 1.066 g/ml
Solubility: Reactive with water
VOC content: Contains no VOCs

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: Excessive heat, moisture.
Incompatible Materials: Water, alcohols, strong bases, amines, acids.
Hazardous Decomposition Products: Carbon oxides, hydrogen cyanide, nitrogen oxides, hydrocarbons.
Possibility of Hazardous Reactions: Possibility of hazardous polymerization if contacted with moisture or other materials that react with isocyanates.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Dose Toxicity:	Di-(2-ethylhexyl) phthalate Polymeric diphenylmethane diisocyanate	Dermal, LD ₅₀ : Oral, LD ₅₀ : Dermal, LD ₅₀ : Oral, LD ₅₀ : Inhalation, LC ₅₀ :	> 5000 mg/kg (rabbit) > 5000 mg/kg (rat) > 5000 mg/kg (rabbit) > 5000 mg/kg (rat) 490 mg/m ³ /4h (rat)
Repeated Dose Toxicity:	N/E		
Sensitization:	May cause sensitization by skin contact or by inhalation.		
Carcinogenicity:	Di(2-ethylhexyl) phthalate is classed as a group 3 carcinogen..		
Neurological Effects:	N/E		
Genetic Effects:	N/E		
Reproductive Effects:	N/E		
Developmental Effects:	N/E		
Target Organ Effects:	Lungs – chronic inhalation can cause respiratory distress and respiratory impairments.		



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SECTION 12: ECOLOGICAL INFORMATION

Biodegradability

Not readily biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS

Recover or recycle if possible.

Dispose of this material in accordance with local, provincial and federal laws and regulations. All provided information only applies to the material as supplied to the user. The characteristics outlined may not apply if the material has been used or otherwise contaminated. It is the responsibility of the user to determine the proper waste identification and disposal methods in compliance with applicable regulations.

SECTION 14: TRANSPORT INFORMATION

NOT REGULATED FOR TRANSPORT

SECTION 15: REGULATORY INFORMATION

Canadian Regulations:

As per WHMIS, this material is classified:

D1A ("Poisonous Material Causing Serious and Toxic Effects") – Very Toxic
D2A ("Poisonous Material Causing Serious and Toxic Effects") – Very Toxic
D2B ("Poisonous Material Causing Serious and Toxic Effects") - Toxic
All of the components of this material appear on the "Domestic Substances List" (DSL).

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all of the information required in the *Controlled Products Regulations*.

US Regulations:

This material is classified as hazardous under OSHA regulation 29 CFR 1910.1200.

SARA Title III: This product contains the following chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and 40 CFR 372:

Di(2-ethylhexyl) phthalate;

Polymeric diphenylmethane diisocyanate,.

Diphenylmethane-4,4'-diisocyanate

All of the components of this material appear on the "Toxic Substances Control Act" (TSCA) inventory.

SECTION 16: OTHER INFORMATION

Abbreviations:

N/E	Not established
TLV	Threshold Limit Value
TWA	Time-weighted average

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