



Chemline ET840

TDI-Polyether Hot Cast Prepolymer

Description

Chemline ET840 is a TDI/polyether-based prepolymer. Curing with MBCA yields a 84 Shore A elastomer highlighted by:

- √ High resilience
- √ Excellent impingement abrasion resistance
- √ Good low temperature properties
- √ Good hydrolytic stability

Packaging, Storage, & Shelf Life

Chemline ET840 is available in 55-gallon drums and 5-gallon pails. Store in sealed containers between 60°F and 90°F. Shelf life is 12 months under normal conditions.

Safety

This product is for industrial use only. Avoid contact with eyes and skin. Do not inhale or ingest. Be sure to read SDS in its entirety prior to using **Chemline ET840**.

Liquid Prepolymer Properties

Property	Value
Physical State at 25°C	Waxy solid
%NCO	3.00-3.30
Viscosity	
70°C (158°F)	2090 cps
82°C (180°F)	1325 cps
100°C (212°F)	740 cps

Typical Processing Conditions

Property	Value
Prepolymer Temperature	85°C (185°F)
MBCA Temperature	116°C (240°F)
MBCA Level (95% stoichiometry, 3.29% NCO)	9.93 pph
Mold Temperature	100°C (212°F)
Pot Life	4-5 minutes
Demold Time	45 minutes
Post Cure Time	16 hours at 100°C (212°F)

Cured Elastomer Properties

Property	Value
Hardness, Shore A	84 A
100% Modulus	730 psi (5.0 MPa)
200% Modulus	970 psi (6.7 MPa)
300% Modulus	1240 psi (8.5 MPa)
Tensile Strength	4800 psi (33.1 MPa)
Elongation	690%
Die C Tear Strength	450 pli (78.9 kN/m)
Trouser Tear	150 pli (26.3 kN/m)
Bashore Rebound	60%
Compression Set, Method B 22 hours at 70°C	25%
Tabor Abrasion	37 mg loss/1000 rev

*Values obtained in laboratory setting for comparison purposes only and should not be considered specifications.

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