



Chemline ET850

TDI-Polyether Hot Cast Prepolymer

Description

Chemline ET850 is an TDI/polyether-based prepolymer. Curing with MBCA yields a 85 Shore A elastomer highlighted by:

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

Packaging, Storage, & Shelf Life

Chemline ET850 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 ET850**.

Liquid Prepolymer Properties

Property	Value
Physical State at 25°C	Waxy solid
%NCO	3.10-3.40
Viscosity	
70°C (158°F)	2160 cps
82°C (180°F)	1370 cps
100°C (212°F)	750 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	10-12 minutes
Demold Time	1 hour
Post Cure Time	16 hours at 100°C (212°F)

Cured Elastomer Properties

Property	Value
Hardness, Shore A	85 A
100% Modulus	805 psi (5.6 MPa)
200% Modulus	1130 psi (7.8 MPa)
300% Modulus	1620 psi (11.2 MPa)
Tensile Strength	5030 psi (34.7 MPa)
Elongation	460%
Die C Tear Strength	360 pli (63.0 kN/m)
Trouser Tear	50 pli (8.8 kN/m)
Bashore Rebound	53%

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