



Chemline EM850

MDI-PTMEG Hot Cast Prepolymer

Description

Chemline EM850 is an MDI/PTMG-based prepolymer. Curing with 1,4 butanediol yields 85 Shore A high-performance elastomers highlighted by:

- √ Superior impingement abrasion resistance
- √ Excellent hydrolysis resistance (acid/base, aqueous solutions and slurries)
- √ High Resilience
- √ Low temperature flexibility
- √ Resistance to attack by micro-organisms

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 EM850.

Packaging, Storage, & Shelf Life

Chemline EM850 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.

Liquid Prepolymer Properties

Property	Value
Physical State at 25°C	Waxy solid
%NCO	6.10-6.56%
Viscosity	
70°C (158°F)	2060 cps
82°C (180°F)	1330 cps
100°C (212°F)	730 cps

Typical Processing Conditions

Property	Value
Prepolymer Temperature	85°C (185°F)
1,4 Butanediol Temperature	40°C (104°F)
1,4 Butanediol Level (95% stoichiometry, 6.33% NCO)	6.4 pph
Mold Temperature	110°C (230°F)
Pot Life	5-6 minutes
Demold Time	60 minutes
Post Cure Time	16 hours at 110°C (230°F)

Cured Elastomer Properties

Property	Value
Hardness, Shore A	85
100% Modulus	970 psi (6.7 MPa)
200% Modulus	1350 psi (9.3 MPa)
300% Modulus	1860 psi (12.8 MPa)
Tensile Strength	4800 psi (33.1 MPa)
Elongation	510%
Die C Tear Strength	480 pli (84.1 kN/m)
Bashore Rebound	64%
Compression Set, Method B 22 hours at 70°C	30%
Specific Gravity	1.09

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

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