



Chemline EM890

MDI-PTMEG Hot Cast Prepolymer

Description

Chemline EM890 is an MDI/PTMG-based prepolymer. Curing with 1,4 butanediol yields 89 Shore A high-performance elastomers highlighted by:

- √ Good impingement abrasion resistance
- √ Excellent hydrolysis resistance (acid/base, aqueous solutions and slurries)
- √ Excellent 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 EM890**.

Packaging, Storage, & Shelf Life

Chemline EM890 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	Viscous liquid
%NCO	7.70-8.10%
Viscosity	
70°C (158°F)	TBD
82°C (180°F)	TBD
100°C (212°F)	450 cps

Typical Processing Conditions

Property	Value
Prepolymer Temperature	100°C (212°F)
1,4 Butanediol Temperature	40°C (104°F)
1,4 Butanediol Level (95% stoichiometry, 8.03% NCO)	8.17 pph
Mold Temperature	110°C (230°F)
Pot Life	4-5 minutes
Demold Time	60 minutes
Post Cure Time	16 hours at 110°C (230°F)

Cured Elastomer Properties

Property	Value
Hardness, Shore A	89 A
100% Modulus	1300 psi (9.0 MPa)
200% Modulus	1920 psi (13.2 MPa)
300% Modulus	2970 psi (20.5 MPa)
Tensile Strength	5980 psi (41.2 MPa)
Elongation	425%
Die C Tear Strength	460 pli (80.6 kN/m)
Bashore Rebound	41%
Compression Set, Method B 22 hours at 70°C	35%

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

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