



Chemline CM850

MDI-Polycaprolactone Hot Cast Prepolymer

Description

Chemline CM850 is an MDI/Polycaprolactone-based prepolymer. Curing with 1,4 butanediol yields 85 Shore A high-performance elastomers highlighted by:

- ✓ Excellent fatigue resistance
- ✓ Good hydrolytic stability
- ✓ High resilience
- ✓ Good cut/tear and abrasion resistance

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 CM850.

Packaging, Storage, & Shelf Life

Chemline CM850 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	Solid
%NCO	6.10-6.50%
Viscosity	
70°C (158°F)	1700 cps
82°C (180°F)	1400 cps
100°C (212°F)	550 cps

Typical Processing Conditions

Property	Value
Prepolymer Temperature	82°C (180°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	10 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	810 psi (5.6 MPa)
200% Modulus	1270 psi (8.8 MPa)
300% Modulus	2100 psi (14.5 MPa)
Tensile Strength	6000 psi (41.4 MPa)
Elongation	460%
Die C Tear Strength	480 pli (84.1 kN/m)
Trouser Tear Strength	320 pli (56.0 kN/m)
Bashore Rebound	64%

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

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