



Chemline SM940

MDI-Ester Hot Cast Prepolymer

Description

Chemline SM940 is a MDI/Ester-based prepolymer. Curing with 1,4 Butanediol yields an 94 Shore A elastomer highlighted by:

- √ Excellent dynamic properties
- √ High resilience
- √ Superior fatigue resistance
- √ Good cut/tear resistance

Packaging, Storage, & Shelf Life

Chemline SM940 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 SM940**.

Liquid Prepolymer Properties

Property	Value
Physical State at 25°C	Waxy solid
%NCO	6.35-6.85
Viscosity	
70°C (158°F)	3360 cps
82°C (180°F)	1833 cps
100°C (212°F)	828 cps

Typical Processing Conditions

Property	Value
Prepolymer Temperature	96°C (205°F)
1,4 Butanediol Temperature	30°C (86°F)
1,4 Butanediol Level (95% stoichiometry, 6.75% NCO)	6.85 pph
Mold Temperature	110°C (230°F)
Pot Life	5 Minutes
Demold Time	60 minutes
Post Cure Time	16 hours at 110°C (230°F)

Cured Elastomer Properties

Property	Value
Hardness, Shore A	94
100% Modulus	1660 psi (11.4 MPa)
200% Modulus	1960 psi (13.5 MPa)
300% Modulus	2750 psi (19.0 MPa)
Tensile Strength	7100 psi (48.9 MPa)
Elongation	450%
Die C Tear Strength	600 pli (105.1 kN/m)
Bashore Rebound	40%
Specific Gravity	1.20

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

Revised 04/2017

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