



Chemline SM851

MDI-Polyester Hot Cast Prepolymer

Description

Chemline SM851 is a MDI/polyester-based prepolymer. Curing with 1,4 Butanediol yields 85-87 Shore A elastomer highlighted by:

- √ Good oil and solvent resistance
- √ High cut/tear strength
- √ Superior abrasion resistance
- √ Liquid at room temperature

Packaging, Storage, & Shelf Life

Chemline SM851 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 SM851**.

Liquid Prepolymer Properties

Property	Value
Physical State at 25°C	Waxy solid to viscous liquid
%NCO	6.6-7.00%
Viscosity	
70°C (158°F)	2370 cps
82°C (180°F)	1380 cps
100°C (212°F)	670 cps

Typical Processing Conditions

Property	1,4 Butanediol
Prepolymer Temperature	90°C (200°F)
Curative Temperature	25°C (77°F)
Curative Level (95% stoichiometry, 6.8% NCO)	6.92 pph
Mold Temperature	115°C (240°F)
Pot Life	3 minutes
Post Cure Time	16 hours at 115°C (240°F)

Cured Elastomer Properties

Property	1,4 Butanediol
Hardness, Shore A	85-87 A
100% Modulus	820 psi (5.7 MPa)
200% Modulus	1130 psi (7.8 MPa)
300% Modulus	1370 psi (9.4 MPa)
Tensile Strength	6300 psi (43.4 MPa)
Elongation	660%
Die C Tear Strength	500 pli (87.6 kN/m)
Trouser Tear	210 pli (36.8 kN/m)
Compression Set	28%
Bashore Rebound	42%

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

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