



Chemline ST860

TDI-Polyester Hot Cast Prepolymer

Description

Chemline ST860 is a TDI/polyester-based prepolymer. Curing with MBCA yields a 86-87 Shore A elastomer highlighted by:

- √ Liquid at room temperature
- √ High tensile strength
- √ Good cut/tear resistance

Packaging, Storage, & Shelf Life

Chemline ST860 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 ST860**.

Liquid Prepolymer Properties

Property	Value
Physical State at 25°C	Viscous liquid
%NCO	4.00-4.40%
Viscosity	
70°C (158°F)	TBD
82°C (180°F)	TBD
100°C (212°F)	TBD

Typical Processing Conditions

Property	Value
Prepolymer Temperature	100°C (212°F)
MBCA Temperature	115°C (240°F)
MBCA Level (95% stoichiometry, 4.37% NCO)	13.19 pph
Mold Temperature	100°C (212°F)
Pot Life	5-6 Minutes
Post Cure Time	16 hours at 100°C (212°F)

Cured Elastomer Properties

Property	Value
Hardness, Shore A	86-87 A
100% Modulus	760 psi (5.2 MPa)
200% Modulus	1025 psi (7.1 MPa)
300% Modulus	1450 psi (10.0 MPa)
Tensile Strength	5530 psi (38.1 MPa)
Elongation	470%
Die C Tear Strength	410 pli (71.8 kN/m)
Trouser Tear	98 pli (17.6 kN/m)
Bashore Rebound	29%

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