

# Experimental XZ 89507.00 Enhanced Polyethylene Resin

## Overview

XZ89507.00 Experimental Polyethylene Resin is a copolymer produced via INSITE™ technology from Dow. It is designed for stretch hooder application and offers a unique combination of holding force, elastic recovery, optics and toughness.

#### Main Characteristics:

- · Excellent elastic recovery and holding force
- · Very high impact resistance and tear properties
- · Ease of processing

#### Complies with:

- U.S. FDA 21 CFR 175.105(c)(5)
- EU, 10/2011

Consult the regulations for complete details.

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.902	g/cm³	0.902	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	0.85	g/10 min	0.85	g/10 min	ASTM D1238
Films	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Film Thickness - Tested	2	mil	50	μm	
Film Puncture Energy	30.1	in·lb	3.40	J	Dow Method
Film Puncture Force	10.1	lbf	45.0	N	Dow Method
Film Puncture Resistance	99.1	ft·lb/in³	8.20	J/cm³	Dow Method
Film Toughness					ASTM D882
MD	581	ft·lb/in³	48.1	J/cm³	
TD	483	ft·lb/in³	40.0	J/cm³	
Tensile Strength					ASTM D882
MD : Yield	508	psi	3.50	MPa	
TD : Yield	696	psi	4.80	MPa	
MD : Break	3350	psi	23.1	MPa	
TD : Break	2710	psi	18.7	MPa	
Tensile Elongation					ASTM D882
MD : Break	480	%	480	%	
TD : Break	530	%	530	%	
Dart Drop Impact	1800	g	1800	g	ASTM D1709B
Elmendorf Tear Strength <sup>1</sup>					ASTM D1922
MD	640	g	640	g	
TD	320	g	320	g	
Optical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Gloss (45°)	79		79		ASTM D2457
Haze	3.00	%	3.00	%	ASTM D1003

## **Extrusion Notes**

Fabrication Conditions For Blown Film

Screw Size: 45 mmDie Gap: 1.5 mmMelt Temperature: 244°C

• Output: 6.6 kg/hr/mm. of die circumference

Die Diameter: 150 mmBlow-Up Ratio: 2.5 to 1Screw Speed: 59 rpm

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#### **Notes**

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

<sup>1</sup> Method B

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