



Technical Data Sheet

ELITE™ AT 6501 Enhanced Polyethylene Resin

Description

ELITE™ AT 6501 Enhanced Polyethylene Resin is an enhanced LLDPE ethylene-octene copolymer from Dow. It offers a unique combination of low seal initiation temperature, high hot tack strength, high impact resistance, good optical properties and it is easy to process.

Main Characteristics

- Low seal initiation temperature and broad hot tack window
- High hot tack strength
- Extremely high impact resistance and good tear properties
- Good optical properties
- High throughput resin with excellent bubble stability

Complies with

- U.S. FDA FCN 424
- EU, No 10/2011

Consult the regulations for complete details.

Additive

- Antiblock: No
- Processing Aid: No
- Slip: No

Properties¹

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ²
Density	0.914	g/cm ³	0.914	g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	0.85	g/10 min	0.85	g/10 min	ASTM D1238
Films					
Film Thickness - Tested	2.0	mil	50	µm	
Film Puncture Energy	85.0	in•lb	9.60	J	Internal Method
Film Puncture Force	22.5	lbf	100	N	Internal Method
Film Puncture Resistance	290	ft-lb/in ³	24.0	J/cm ³	Internal Method
Secant Modulus					ASTM D882
2% Secant, MD	21500	psi	148	MPa	
2% Secant, TD	23400	psi	161	MPa	
Tensile Strength					ASTM D882
MD: Yield	1350	psi	9.30	MPa	
TD: Yield	1330	psi	9.20	MPa	
MD: Break	6380	psi	44.0	MPa	
TD: Break	6090	psi	42.0	MPa	

1. Typical properties: these are not to be construed as specifications. Users should confirm the results by their own tests.
2. ASTM: American Society for Testing and Materials



Properties (Cont.)

Films	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ²
Tensile Elongation					ASTM D882
MD: Break	550	%	550	%	
TD: Break	600	%	600	%	
Dart Drop Impact	1500	g	1500	g	ASTM D1709A
Elmendorf Tear Strength					ASTM D1922
MD	590	g	590	g	
TD	1000	g	1000	g	
Thermal					
Vicat Softening Temperature	216	°F	102	°C	ASTM D1525
Melting Temperature (DSC)	239	°F	115	°C	Internal Method
Optical					
Gloss (45°)	64		64		ASTM D2457
Haze	8.10	%	8.10	%	ASTM D1003
Extrusion Notes					
Fabrication Conditions:					
<ul style="list-style-type: none">• Die Diameter: 8 in• Die Gap: 70 mil• Melt Temperature: 429°F• Output: 10.4 lb/hr/in. of die circumference• Screw Size: 3.5 in.• Blow-up Ratio: 2.5 to 1• Screw Speed: 35 rpm• Frost Line Height: 37 in.					

