

ELITE™ AT 6202

Enhanced Polyethylene Resin

Overview

ELITE™ AT 6202 Enhanced Polyethylene Resin is an enhanced LLDPE ethylene-octene copolymer from Dow. This grade is a fully formulated sealant resin designed for demanding applications where hot tack strength is a key requirement.

Main Characteristics

- High Hot Tack Strength
- Broad Hot Tack Window
- Low Heat Seal Initiation Temperature
- High Throughput Resin with excellent bubble stability

Complies with:

- U.S. FDA FCN 424
- Canadian HPFB No Objection
- EU, No 20/2011

Consult the regulations for complete details.

Additive

- Antiblock: 1875 ppm
- Slip: 750 ppm
- Processing Aid: Yes

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.908 g/cm ³	0.908 g/cm ³	ASTM D792
Base Density ¹	0.907 g/cm ³	0.907 g/cm ³	Dow Method
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	1.0 mil	25 µm	
Film Puncture Energy (1.0 mil (25 µm))	38.0 in·lb	4.29 J	Dow Method
Film Puncture Force (1.0 mil (25 µm))	12.2 lbf	54.3 N	Dow Method
Film Puncture Resistance (1.0 mil (25 µm))	253 ft·lb/in ³	20.9 J/cm ³	Dow Method
Secant Modulus			ASTM D882
2% Secant, MD : 1.0 mil (25 µm)	10000 psi	68.9 MPa	
2% Secant, TD : 1.0 mil (25 µm)	11200 psi	77.2 MPa	
Tensile Strength			ASTM D882
MD : Yield, 1.0 mil (25 µm)	1150 psi	7.93 MPa	
TD : Yield, 1.0 mil (25 µm)	1130 psi	7.79 MPa	
MD : Break, 1.0 mil (25 µm)	7100 psi	49.0 MPa	
TD : Break, 1.0 mil (25 µm)	5800 psi	40.0 MPa	
Tensile Elongation			ASTM D882
MD : Break, 1.0 mil (25 µm)	450 %	450 %	
TD : Break, 1.0 mil (25 µm)	600 %	600 %	
Dart Drop Impact (1.0 mil (25 µm))	1000 g	1000 g	ASTM D1709B
Elmendorf Tear Strength ²			ASTM D1922
MD : 1.0 mil (25 µm)	210 g	210 g	
TD : 1.0 mil (25 µm)	430 g	430 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Melting Temperature (DSC)	223 °F	106 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 1.00 mil (25.4 µm))	63	63	ASTM D2457
Haze (1.00 mil (25.4 µm))	7.9 %	7.9 %	ASTM D1003
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
VFFS Hot Tack Window ³	45°F (205-250) or 25°C (96-121)	45°F (205-250) or 25°C (96-121)	Dow Method



Extrusion Notes

Fabrication Conditions For Blown Film:

- Screw Size: 3.5in. (88.9 mm); 30:1ratio L/D
- Screw Type: DSBII
- Die Gap: 70mil (1.8 mm)
- Melt Temperature: 433°F (223°C)
- Output: 11.9 lb/hr/in. of die circumference
- Die Diameter: 8 in.
- Blow-Up Ratio: 2.5 to 1
- Frost Line Height: 52 in. (1321 mm)

Notes

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

¹ Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

² Method B

³ 2 mil coex film, 20/60/20 with MDPE core, sealant layer formulated with 10% LDPE and slip and AB. Tested on VFFS machine with 4 lbs fill weight, 0.25 second dwell time.

