Technical Data Sheet

ELITE™ AT 6502B Enhanced Polyethylene Resin

Description

ELITE™ AT 6502B 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.

Sustainability Attribute:

Resoursa™
Advancing resource efficiency with DOW

Main Characteristics

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

Complies with:

- U.S. FDA FCN 424
- Canadian HPFB No Objection

Consult the regulations for complete details.

Additives

- Antiblock: Yes
- Slip: Yes
- Processing aid: No

Properties[1]

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method[2]
Density	0.916	g/cm^3	0.916	g/cm^3	ASTM D792
Base Density[3]	0.914	g/cm^3	0.914	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					
Film Thickness – Tested	2	mil	50	µm	
Film Puncture Energy to Break	37.2	in·lb	4.2	J	
Film Puncture Resistance	123.3	ft·lb/in^3	10.2	J/cm^3	
Secant Modulus					ASTM D882
2% Secant, MD	57000	psi	393	MPa	
2% Secant, TD	57870	psi	399	MPa	

1. These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.
2. ASTM: American Society for Testing and Materials
3. 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/cm^3. Base density is the estimated density of the polymer if it did not contain any antiblock.

Properties (Cont.)

Films	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Tensile Strength					ASTM D882
MD : Yield	2610	psi	18.0	MPa	
TD : Yield	2538	psi	17.5	MPa	
MD : Break	7962	psi	54.9	MPa	
TD : Break	7628	psi	52.6	MPa	
Tensile Elongation					ASTM D882
MD : Break	471	%	471	%	
TD : Break	491	%	491	%	
Dart Drop Impact	1815	g	1815	g	ASTM D1709A
Thermal					
Melting Temperature (DSC)	246	°F	119	°C	Dow Method
Optical					
Gloss (45°)	48		48		ASTM D2457
Haze	16.5	%	16.5	%	ASTM D1003
Extrusion Notes					

Fabrication Conditions:

- Die Diameter: 200 mm
- Die Gap: 1.8 mm
- Melt Temperature: 230°C
- Output: 50 kg/h
- Blow-Up Ratio: 2.5 to 1
- Screw Speed: 40 rpm
- Frost Line height: 500 mm