



ELITE™ 5220G

Enhanced Polyethylene Resin

Overview

- Excellent extensibility
- High impact and puncture resistance
- Excellent on-pallet load elongation for higher yields on regular loads

Complies with:

- U.S. FDA FCN 424
- Europe EU-Directive 2002/72/EC
 - Consult the regulations for complete details.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.915 g/cm ³	0.915 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	3.5 g/10 min	3.5 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	0.80 mil	20 µm	
Film Puncture Energy (0.80 mil (20 µm))	36.0 in·lb	4.07 J	Dow Method
Film Puncture Force			
0.80 mil (20 µm)	11.0 lbf	48.9 N	Dow Method ¹
0.80 mil (20 µm)	10.0 lbf	44.5 N	Dow Method
Film Puncture Resistance (0.80 mil (20 µm))	323 ft·lb/in ³	26.7 J/cm ³	Dow Method
Tensile Strength			ASTM D882
MD: Yield, 0.80 mil (20 µm)	1300 psi	8.96 MPa	
TD: Yield, 0.80 mil (20 µm)	1220 psi	8.41 MPa	
MD: Break, 0.80 mil (20 µm)	5800 psi	40.0 MPa	
TD: Break, 0.80 mil (20 µm)	5200 psi	35.9 MPa	
Tensile Elongation			ASTM D882
MD: Break, 0.80 mil (20 µm)	450 %	450 %	
TD: Break, 0.80 mil (20 µm)	650 %	650 %	
Dart Drop Impact (0.80 mil (20 µm))	630 g	630 g	ASTM D1709B
Elmendorf Tear Strength			ASTM D1922
MD: 0.80 mil (20 µm)	390 g	390 g	
TD: 0.80 mil (20 µm)	600 g	600 g	
Ultimate Stretch (0.8 mil (20.3 µm))	300 %	300 %	Dow Method ²
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	210 °F	98.9 °C	ASTM D1525
Melting Temperature (DSC)	253 °F	123 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 0.800 mil (20.3 µm))	96	96	ASTM D2457
Haze (0.800 mil (20.3 µm))	0.60 %	0.60 %	ASTM D1003
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	520 °F	271 °C	

Extrusion Notes

Fabrication Conditions For Cast Film:

- Die Gap: 20 mil (0.50 mm)
- Melt Temperature: 520°F (271°C)
- Air Gap: 3 in. (7.6 cm)
- Haul Off Speed: 600 fpm (183 m/min)

Notes

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

¹ 250% pre-stretch; On-Pallet testing determined by LANTECH SHS Tester.

² On-Pallet testing determined by LANTECH SHS Tester.

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