

ELITE™ 5230G

Enhanced Polyethylene Resin

Overview

ELITE™ 5230G Enhanced Polyethylene Resin is produced via INSITE™ Technology from Dow. This resin offers high impact strength and good puncture resistance at moderate stretch levels for irregularly shaped loads. In addition, this resin provides excellent extensibility for higher yields on regular loads.

- Excellent extensibility
- High impact and puncture resistance

Complies with:

- U.S. FDA FCN 424
- Canadian HPFB No Objection
- EU, No 10/2011
 - Consult the regulations for complete details.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.916 g/cm ³	0.916 g/cm ³	ASTM D792
Base Density ¹	0.916 g/cm ³	0.916 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	4.0 g/10 min	4.0 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	0.80 mil	20 µm	
Film Puncture Force ² (0.80 mil (20 µm))	11.0 lbf	48.9 N	Dow Method
Film Puncture Resistance (0.80 mil (20 µm))	326 ft-lb/in ³	27.0 J/cm ³	Dow Method
Tensile Strength			ASTM D882
MD : Yield, 0.80 mil (20 µm)	1320 psi	9.07 MPa	
TD : Yield, 0.80 mil (20 µm)	1220 psi	8.39 MPa	
MD : Break, 0.80 mil (20 µm)	6670 psi	46.0 MPa	
TD : Break, 0.80 mil (20 µm)	5520 psi	38.1 MPa	
Tensile Elongation			ASTM D882
MD : Break, 0.80 mil (20 µm)	540 %	540 %	
TD : Break, 0.80 mil (20 µm)	720 %	720 %	
Dart Drop Impact (0.80 mil (20 µm))	320 g	320 g	ASTM D1709B
Elmendorf Tear Strength			ASTM D1922
MD : 0.80 mil (20 µm)	310 g	310 g	
TD : 0.80 mil (20 µm)	510 g	510 g	
Ultimate Stretch ³ (0.8 mil (20.3 µm))	330 %	330 %	Dow Method
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Melting Temperature (DSC)	252 °F	122 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 0.800 mil (20.3 µm))	95	95	ASTM D2457
Haze (0.800 mil (20.3 µm))	0.50 %	0.50 %	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. (7.6cm)
- 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 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.

² 250% pre-stretch; On-Pallet testing.

³ On-Pallet testing

