



Technical Data Sheet

ELITE™ 5230GC Enhanced Polyethylene Resin

Overview

ELITE™ 5230GC Enhanced Polyethylene Resin is produced via INSITE™ Technology from Dow. Film made from 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.

Sustainability Attribute:



Main Characteristics:

- 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 Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ¹
Density	0.916	g/cm ³	0.916	g/cm ³	ASTM D792
Base Density ²	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	ISO 1133
Films					
Film Thickness - Tested	1	mil	20	µm	
Film Puncture Force (0.79 mil (20 µm))	11.0	lbf	48.9	N	Dow Method

1. ASTM: American Society for Testing and Materials
ISO: International Standardization Organization
2. 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.

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

Physical Properties (Cont.)

Films	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Film Puncture Resistance ³ (0.79 mil (20 µm))	326	ft-lb/in ³	27.0	J/cm ³	Dow Method
Tensile Strength					ASTM D882
MD : Yield, 0.79 mil (20 µm)	1320	psi	9.07	MPa	
TD : Yield, 0.79 mil (20 µm)	1220	psi	8.39	MPa	
MD : Break, 0.79 mil (20 µm)	6670	psi	46.0	MPa	
TD : Break, 0.79 mil (20 µm)	5530	psi	38.1	MPa	
Tensile Elongation					ASTM D882
MD : Break, 0.79 mil (20 µm)	540	%	540	%	
TD : Break, 0.79 mil (20 µm)	720	%	720	%	
Dart Drop Impact (0.79 mil (20 µm))	320	g	320	g	ASTM D1709B
Elmendorf Tear Strength					ASTM D1922
MD : 0.79 mil (20 µm)	310	g	310	g	
TD : 0.79 mil (20 µm)	510	g	510	g	
Ultimate Stretch - On-Pallet testing (0.8 mil (20.0 µm))	330	%	330	%	Dow Method
Thermal					
Melting Temperature (DSC)	252	°F	122	°C	Dow Method
Optical					
Gloss (45°, 0.787 mil (20.0 µm))	95		95		ASTM D2457
Haze (0.787 mil (20.0 µm))	0.500	%	0.500	%	ISO 14782
Extrusion					
Melt Temperature	520	°F	271	°C	
Extrusion Notes					
Fabrication Conditions for Cast Film:					
<ul style="list-style-type: none"> 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) 					

3. 250% pre-stretch; On-Pallet testing

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