



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.

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 | 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 | ISO 1133 |
| Films | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Film Thickness - Tested | 1 mil | 20 µm | |
| Film Puncture Force (0.79 mil (20 µm)) | 11.0 lbf | 48.9 N | Dow Method |
| Film Puncture Resistance ² (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 | 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°, 0.787 mil (20.0 µm)) | 95 | 95 | ASTM D2457 |
| Haze (0.787 mil (20.0 µm)) | 0.500 % | 0.500 % | ISO 14782 |
| Extrusion | Nominal Value (English) | Nominal Value (SI) | |
| Melt Temperature | 520 °F | 271 °C | |

Extrusion Notes

Fabrication Conditions For Cast Film:

- Die gap: 20 mil (0.50mm)
- 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 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

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