



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
- EU, No 10/2011

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 | 1 mil | 20 µm | |
| Film Puncture Energy (0.80 mil (20 µm)) | 36.0 in·lb | 4.07 J | Dow Method |
| Film Puncture Force | | | Dow Method |
| 0.80 mil (20 µm) | 10.0 lbf | 44.5 N | |
| 0.80 mil (20 µm) ¹ | 11.0 lbf | 48.9 N | |
| 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 ² (0.8 mil (20.3 µm)) | 300 % | 300 % | Dow Method |
| 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)) | 0.600 % | 0.600 % | 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)

