

CEFOR™ 1210P

Linear Low Density Polyethylene Resin

Overview CEFOR™ 1210P is a butene Linear Low Density Polyethylene for general blown extrusion film applications.

Main Characteristic and Applications:

- Used in Industrial, Food & Specialty Packaging
- Better optics and processability
- Better color stability
- Good sealing performance

Complies with:

- U.S FDA 21 CFR 177. 1520 (c) 3.2a.
- EU. No 10/2011

Consult the regulations for complete details.

Additive - Antiblock: 2000 ppm - Slip: 1200 ppm - Processing Aid: No

| Physical Properties | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--------------------------------------|--------------------------|-------------------------|-------------------------|
| Density | 0.919 g/cm ³ | 0.919 g/cm ³ | ASTM D792 |
| Base Density | 0.918 g/cm ³ | 0.918 g/cm ³ | Dow Method ¹ |
| Melt Mass-Flow Rate (190 °C/2.16 kg) | 1.0 g/10 min | 1.0 g/10 min | ISO 1133 |
| Thermal Properties | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Vicat Softening Point | 214 °F | 101 °C | ASTM D1525 |
| Melting Temperature (DSC) | 241 °F | 116 °C | Dow Method |
| Film Properties | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Film Thickness – Tested | 2.0 mil | 51 µm | |
| Film Puncture Resistance | 99 ft/lb/in ³ | 8.19 J/cm ³ | Dow Method |
| Secant Modulus | | | ASTM D882 |
| 2% Secant, MD | 26600 psi | 183 MPa | |
| 2% Secant, TD | 31500 psi | 217 MPa | |
| Tensile Strength | | | ASTM D882 |
| Yield : MD | 1500 psi | 10.3 MPa | |
| Yield : TD | 1600 psi | 11.0 MPa | |
| Break : MD | 4600 psi | 31.7 MPa | |
| Break : TD | 3630 psi | 25.0 MPa | |
| Tensile Elongation | | | ASTM D882 |
| Break : MD | 660 % | 660 % | |
| Break : TD | 710 % | 710 % | |
| Dart Drop Impact | 100 g | 100 g | ASTM D1709A |
| Elmendorf Tear Strength | | | ASTM D1922 ² |
| MD | 110 g | 110 g | |
| TD | 260 g | 260 g | |
| Optical Properties | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Gloss (20°) | 69 | 69 | ASTM D2457 |
| Haze | 11 % | 11 % | ASTM D1003 |

Extrusion Notes

Fabrication Conditions for Blown Film:

- Die Gap: 70 mil (1.8 mm)
- Melt Temperature: 440 °F (227°C)
- Output: 120 lb/hr (55 kg/hr)
- Die Diameter: 8 in. (203 mm)
- Blow-Up Ratio: 2.5:1
- Frost Line Height: 28. (71 cm)

Notes

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

¹ Base density is estimated using the assumption that every 1000 ppm 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 antiblock.

² Method B; Modified Rectangular Test Specimen



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Published: 2015-04-20

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