



DOW™ LLDPE 1613.11

Linear Low Density Polyethylene Resin

Overview

Dow LLDPE 1613.11 is a Linear Low Density Polyethylene Resin, 1-hexene copolymer, produced in the Solution process. This resin is designed to be used in blown extrusion to produce films for industrial applications and consumer packaging. It contains slip and antiblock additives.

Complies with:

- U.S. FDA, 21 CFR 177.1520(c)3.2a
- Europe Commission Regulation (EU) No 10/2011 (See NOTES)

Consult the regulations for complete details.

Additive

- Antiblock: 2500 ppm
- Slip: 1000 ppm

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|------------------------------------|----------------------------|-------------------------|-------------|
| Density | 0.923 g/cm ³ | 0.923 g/cm ³ | ASTM D792 |
| Base Density ¹ | 0.923 g/cm ³ | 0.923 g/cm ³ | Dow Method |
| Melt Index (190°C/2.16 kg) | 1.3 g/10 min | 1.3 g/10 min | ASTM D1238 |
| Films | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Film Thickness - Tested | 2.0 mil | 51 µm | |
| Film Puncture Resistance | 92.6 ft·lb/in ³ | 7.66 J/cm ³ | Dow Method |
| Secant Modulus | | | ASTM D882 |
| 2% Secant, MD : 2.0 mil (51 µm) | 27400 psi | 189 MPa | |
| 2% Secant, TD : 2.0 mil (51 µm) | 32500 psi | 224 MPa | |
| Tensile Strength | | | ASTM D882 |
| MD : Yield, 2.0 mil (51 µm) | 1620 psi | 11.2 MPa | |
| TD : Yield, 2.0 mil (51 µm) | 1730 psi | 11.9 MPa | |
| MD : Break, 2.0 mil (51 µm) | 4860 psi | 33.5 MPa | |
| TD : Break, 2.0 mil (51 µm) | 4600 psi | 31.7 MPa | |
| Tensile Elongation | | | ASTM D882 |
| MD : Break, 2.0 mil (51 µm) | 900 % | 900 % | |
| TD : Break, 2.0 mil (51 µm) | 890 % | 890 % | |
| Dart Drop Impact (2.0 mil (51 µm)) | 270 g | 270 g | ASTM D1709A |
| Elmendorf Tear Strength | | | ASTM D1922 |
| MD : 2.0 mil (51 µm) | 750 g | 750 g | |
| TD : 2.0 mil (51 µm) | 1100 g | 1100 g | |
| Optical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Gloss (45°, 2.00 mil (50.8 µm)) | 42 | 42 | ASTM D2457 |
| Haze (2.00 mil (50.8 µm)) | 22 % | 22 % | ASTM D1003 |

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.

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This document is intended for use within Latin America

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