



TRICOLENE LLB1919SB

Linear Low Density Polyethylene



ADDING A WORLD OF VALUE

PRODUCT DESCRIPTION

This type of LLDPE is a copolymer of ethylene and 1-butene produced with Ziegler-Natta catalysts in a gas phase polymerization process. This product contains slip and antiblock additives.

PROCESSING METHODS

Blown Film Extrusion

CHARACTERISTICS

Good Mechanical Properties
Good Mixing with LDPE
Production of Thin Films

APPLICATIONS

Trash Bags
Agricultural Films
Liners for Drums

RESIN PROPERTIES

TEST METHOD

VALUES, ENGLISH UNITS

VALUES, INTERNATIONAL UNITS

| | | | | |
|---------------------------------------|------------------|------------|-------------------------|-------------------------|
| Melt Flow Rate 2.16 kgf/190 °C | MFR ₂ | ASTM D1238 | 1.1 g/10 min | 1.1 g/10 min |
| Density 23 °C | | ASTM D1505 | 0.919 g/cm ³ | 0.919 g/cm ³ |
| Slip | | --- | 1,000 ppm | 1,000 ppm |
| Antiblock | | --- | 5,500 ppm | 5,500 ppm |
| Processing Aid | | --- | None | None |
| Antioxidant Package | | --- | Yes | Yes |

BLOWN FILM PROPERTIES

TEST METHOD

VALUES, ENGLISH UNITS

VALUES, INTERNATIONAL UNITS

| | | | | |
|--|--|-------------|--------------------------------|--------------------|
| Evaluated Film Thickness | | --- | 1.0 mils | 25.4 µm |
| Dart Impact Strength 38.0 mm (1.5 in), 0.66 m (26.0 in), F50 | | ASTM D1709A | 120 g | 120 g |
| Elmendorf Tear Strength | | ASTM D1922 | MD 130 g TD 490 g | 130 g 490 g |
| Tensile Strength at Break 20,0 in/min (508 mm/min) | | ASTM D882 | MD 5,500 psi TD 3,500 psi | 38 MPa 24 MPa |
| Tensile Elongation at Break 20,0 in/min (508 mm/min) | | ASTM D882 | MD 800 % TD 950 % | 800 % 950 % |
| Tensile Secant Modulus of Elasticity 1 % Elongation, 0,051 in/min (1,3 mm/min) | | ASTM D882 | MD 27,000 psi TD 33,000 psi | 186 MPa 228 MPa |
| Haze | | ASTM D1003 | 9.0 % | 9.0 % |

PROCESSING CONDITIONS OF EVALUATED FILM

VALUES, ENGLISH UNITS

VALUES, INTERNATIONAL UNITS

| | | | |
|--------------------|--------------|---|--------------|
| Die Diameter | 6.0 in | ✓ | 152 mm |
| Die Gap | 100 mils | ✓ | 2.5 mm |
| Melt Temperature | 450 ° F | ✓ | 232 ° C |
| Blow-up Ratio, BUR | 2.5 --- | ✓ | 2.5 --- |
| Output | 100.0 Lb/h | ✓ | 45.4 kg/h |
| Specific Output | 5.31 Lb/h/in | ✓ | 0.09 kg/h/cm |
| Take-off Speed | 800.0 ft/min | ✓ | 243.9 m/min |

The data presented here is true and accurate to the best of our knowledge. Likewise, the values are nominal and should not be taken as minimum or maximum specifications. No warranty, express or implied, is made regarding resin performance. The customer must validate these properties according to his own evaluations on his machine and in his laboratory.

REGULATORY COMPLIANCE

This resin complies with the following FDA regulation: 21 CFR 177.1520: Olefinic Polymers. This regulation describes polyolefin resins that can be used safely for food packaging and preservation at low temperatures and at ambient temperatures. This resin is not designed for use in medical applications and should not be used in such applications.