

TECHNICAL DATA SHEET

LLB1919

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.

PROCESSING METHODS

Blown Film (Co)Extrusion

CHARACTERISTICS

Good Mechanical Properties
Good Mixing with LDPE

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
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 Strenght 38.0 mm (1.5 in), 0.66 m (26.0 in), F50	ASTM D1709A	120 g	120 g
Elmendorf Tear Strenght	ASTM D1922	MD 130 g TD 490 g	130 g 490 g
Tensile Strenght 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 %
Tensil 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.