

TECHNICAL DATA SHEET

LLB1918SB

Linear Low Density Polyethylene

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

Toughness and strength

APPLICATIONS

Agricultural, Food and Industrial Packaging.

RESIN PROPERTIES

Melt Flow Rate 2.16 kgf/190 °C MFR₂
Density 23 °C
Slip
Antiblock
Antioxidant Package

TEST METHOD

ASTM D1238
ASTM D1505

VALUES, ENGLISH UNITS

1.0 g/10 min
0.918 g/cm³
1,500 ppm
6,300 ppm
Yes

VALUES, INTERNATIONAL UNITS

1.0 g/10 min
0.918 g/cm³
1,500 ppm
6,300 ppm
Yes

FILM PROPERTIES *

Evaluated Film Thickness
Dart Impact Strenght
38.0 mm (1.5 in), 0.66 m (26.0 in), F50

TEST METHOD

ASTM D1709A

VALUES, ENGLISH UNITS

1.0 mils
100 g

VALUES, INTERNATIONAL UNITS

25.4 µm
100 g

Elmendorf Tear Strenght

ASTM D1922

MD 100 g
TD 330 g

100 g
330 g

Tensile Strenght at Yield

20,0 in/min (508 mm/min)

ASTM D882

MD 1,600 psi
TD 1,600 psi

11 MPa
11 MPa

Tensile Strenght at Break

20,0 in/min (508 mm/min)

ASTM D882

MD 7,100 psi
TD 4,900 psi

49 MPa
34 MPa

Tensile Elongation at Break

20,0 in/min (508 mm/min)

ASTM D882

MD 540 %
TD 830 %

540 %
830 %

Tensil Secant Modulus of Elasticity

1 % Elongation, 0,051 in/min (1,3 mm/min)

ASTM D882

MD 29,000 psi
TD 33,400 psi

200 MPa
230 MPa

Haze

ASTM D1003

11.0 %

11.0 %

Specular Gloss 45 °

ASTM D2457

56.0

56.0

PROCESSING CONDITIONS OF THE EVALUATED FILM

Die Diameter
Die Gap
Blow-up Ratio, BUR

TEST METHOD

VALUES, ENGLISH UNITS

4.0 in
100 mils
2.5 ---

VALUES, INTERNATIONAL UNITS

102 mm
2.5 mm
2.5 ---

* 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.