

TECHNICAL DATA SHEET

mLLH1918SB

Linear Low Density Polyethylene
Metallocene

PRODUCT DESCRIPTION

This type of mLLDPE is a copolymer of ethylene and 1-hexene produced with Metallocene catalysts in a gas phase polymerization process.

PROCESSING METHODS

Blown Film Extrusion

CHARACTERISTICS

Good Impact and Tensile Properties
Good Processability
Good Sealability

APPLICATIONS

Consumer and Industrial Packaging
Automatic Food Packaging

RESIN PROPERTIES

TEST METHOD

VALUES, ENGLISH UNITS

VALUES, INTERNATIONAL UNITS

Melt Flow Rate 2.16 kgf/190 °C MFR₂

ASTM D1238

1.0 g/10 min

1.0 g/10 min

Density 23 °C

ASTM D1505

0.918 g/cm³

0.918 g/cm³

Slip

1,000 ppm

1,000 ppm

Antiblock

5,000 ppm

5,000 ppm

Processing Aid

Yes

Yes

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

ASTM D1709A

490 g

490 g

38.0 mm (1.5 in), 0.66 m (26.0 in), F50

Elmendorf Tear Strenght

ASTM D1922

MD

259 g

259 g

TD

486 g

486 g

Tensile Strenght at Yield

ASTM D882

MD

1,410 psi

9.7 MPa

20.0 in/min (508 mm/min)

TD

1,410 psi

9.7 MPa

Tensile Strenght at Break

ASTM D882

MD

7,612 psi

52.5 MPa

20.0 in/min (508 mm/min)

TD

6,453 psi

44.5 MPa

Tensile Elongation at Break

ASTM D882

MD

540 %

540 %

20.0 in/min (508 mm/min)

TD

640 %

640 %

Haze

ASTM D1003

20.0 %

20.0 %

Specular Gloss 45 °

ASTM D2457

40.0

40.0

PROCESSING CONDITIONS OF EVALUATED FILM

VALUES, ENGLISH UNITS

VALUES, INTERNATIONAL UNITS

Blow-up Ratio, BUR

2.5 ---

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.