



AVENTIR LLB-03

LINEAR LOW DENSITY POLYETHYLENE

Technical Data Sheet | FIN-X Polymers

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 reference does not have any slip or antiblock additives.

GENERAL

Category	Details
Processing Methods	Cast Film Extrusion
Characteristics	Good Stiffness
Applications	Cast Film Blend Resin for General-Purpose Packaging

RESIN PROPERTIES

Property / condition	Test method	English value	SI value
Melt Flow Rate, MFR ₂ (2.16 kgf / 190°C)	ASTM D1238	3.5 g/10 min	3.5 g/10 min
Density (23°C)	ASTM D1505	0.925 g/cm ³	0.925 g/cm ³
Antioxidant Package	---	Yes	Yes

CAST FILM PROPERTIES

Property / condition	Test method	English value	SI value
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	50 g	50 g
Elmendorf Tear Strength - MD	ASTM D1922	60 g	60 g
Elmendorf Tear Strength - TD	ASTM D1922	300 g	300 g
Tensile Strength at Break - MD (20.0 in/min [508 mm/min])	ASTM D882	3,200 psi	22.1 MPa
Tensile Strength at Break - TD (20.0 in/min [508 mm/min])	ASTM D882	2,800 psi	19.3 MPa
Tensile Elongation at Break - MD (20.0 in/min [508 mm/min])	ASTM D882	620%	620%
Tensile Elongation at Break - TD (20.0 in/min [508 mm/min])	ASTM D882	750%	750%
Tensile Secant Modulus of Elasticity - MD (1% Elongation, 0.051 in/min [1.3 mm/min])	ASTM D882	32,000 psi	220.7 MPa
Tensile Secant Modulus of Elasticity - TD (1% Elongation, 0.051 in/min [1.3 mm/min])	ASTM D882	36,000 psi	248.3 MPa
Haze	ASTM D1003	2.5%	2.5%
Specular Gloss (45°)	ASTM D2457	90.0	90.0

PROCESSING CONDITIONS OF EVALUATED FILM

Property	English value	SI value
Melt Temperature	525 °F	274 °C
Chill Roll Temperature	70 °F	21 °C
Specific Output	13.00 Lb/h/in	2.33 kg/h/cm

DATA NOTICE

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 NOTES

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.

Values are typical and are not to be construed as specifications. Validate performance for the intended application before final material selection.