



AVENTIR LDF-02

LOW DENSITY POLYETHYLENE

Technical Data Sheet | FIN-X Polymers

PRODUCT DESCRIPTION

This type of Prime High Clarity LDPE is a homopolymer of ethylene without any slip or antiblock additives.

GENERAL

Category	Details
Processing Methods	Blown Film Extrusion Cast Film Extrusion Foam Extrusion
Characteristics	High Optical Properties Good Processability
Applications	Lamination Films Foams Light-Duty Shrink Films

RESIN PROPERTIES

Property / condition	Test method	English value	SI value
Melt Flow Rate, MFR ₂ (2.16 kgf / 190°C)	ASTM D1238	2.0 g/10 min	2.0 g/10 min
Density (23°C)	ASTM D1505	0.923 g/cm ³	0.923 g/cm ³
Antioxidant Package	---	Yes	Yes

BLOWN FILM PROPERTIES

Property / condition	Test method	English value	SI value
Evaluated Film Thickness	---	1.5 mils	38.1 µm
Dart Impact Strength (38.0 mm [1.5 in], 0.66 m [26.0 in], F50)	ASTM D1709A	110 g/F50	110 g/F50
Elmendorf Tear Strength - MD	ASTM D1922	290 g	290 g
Elmendorf Tear Strength - TD	ASTM D1922	100 g	100 g
Tensile Strength at Yield - MD (20.0 in/min [508 mm/min])	ASTM D882	1,500 psi	10.3 MPa
Tensile Strength at Yield - TD (20.0 in/min [508 mm/min])	ASTM D882	1,600 psi	11.0 MPa
Tensile Strength at Break - MD (20.0 in/min [508 mm/min])	ASTM D882	4,300 psi	29.7 MPa
Tensile Strength at Break - TD (20.0 in/min [508 mm/min])	ASTM D882	3,300 psi	22.8 MPa
Tensile Elongation at Break - MD (20.0 in/min [508 mm/min])	ASTM D882	240%	240%
Tensile Elongation at Break - TD (20.0 in/min [508 mm/min])	ASTM D882	550%	550%
Tensile Secant Modulus of Elasticity - MD (1% Elongation, 0.051 in/min [1.3 mm/min])	ASTM D882	30,000 psi	206.9 MPa
Tensile Secant Modulus of Elasticity - TD (1% Elongation, 0.051 in/min [1.3 mm/min])	ASTM D882	37,000 psi	255.2 MPa
Haze	ASTM D1003	5.6%	5.6%
Specular Gloss (45°)	ASTM D2457	69.0	69.0

PROCESSING CONDITIONS OF EVALUATED FILM

Property	English value	SI value
Die Diameter	2.5 in	64 mm
Die Gap	30 mils	0.8 mm
Melt Temperature	350 °F	177 °C
Blow-up Ratio, BUR	2.5 ---	2.5 ---
Specific Output	8.00 Lb/h/in	1.43 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.