



AVENTIR LDF-04

LOW DENSITY POLYETHYLENE

Technical Data Sheet | FIN-X Polymers

PRODUCT DESCRIPTION

This type of Prime LDPE is a homopolymer of ethylene.

GENERAL

Category	Details
Processing Methods	Blown Film (Co)Extrusion Cast Film (Co)Extrusion
Characteristics	High Clarity Properties Excellent Processability and Draw Down High COF
Applications	Very Thin Films for Lamination Cast Stretch Films Laundry Films

RESIN PROPERTIES

Property / condition	Test method	English value	SI value
Melt Flow Rate, MFR ₂ (2.16 kgf / 190°C)	ASTM D1238	4.0 g/10 min	4.0 g/10 min
Density (23°C)	ASTM D1505	0.922 g/cm ³	0.922 g/cm ³
Antioxidant Package	---	Yes	Yes

FILM PROPERTIES [1]

Property / condition	Test method	English value	SI value
Evaluated Film Thickness	---	1.2 mils	30.5 µm
Dart Impact Strength (38.0 mm [1.5 in], 0.66 m [26.0 in], F50)	ASTM D1709A	70 g	70 g
Elmendorf Tear Strength - MD	ASTM D1922	290 g	290 g
Elmendorf Tear Strength - TD	ASTM D1922	110 g	110 g
Tensile Strength at Yield - MD (20.0 in/min [508 mm/min])	ASTM D882	1,500 psi	10 MPa
Tensile Strength at Yield - TD (20.0 in/min [508 mm/min])	ASTM D882	1,400 psi	10 MPa
Tensile Strength at Break - MD (20.0 in/min [508 mm/min])	ASTM D882	3,300 psi	23 MPa
Tensile Strength at Break - TD (20.0 in/min [508 mm/min])	ASTM D882	2,200 psi	15 MPa
Tensile Elongation at Break - MD (20.0 in/min [508 mm/min])	ASTM D882	180%	180%
Tensile Elongation at Break - TD (20.0 in/min [508 mm/min])	ASTM D882	490%	490%
Tensile Secant Modulus of Elasticity - MD (1% Elongation, 0.051 in/min [1.3 mm/min])	ASTM D882	25,000 psi	172 MPa
Tensile Secant Modulus of Elasticity - TD (1% Elongation, 0.051 in/min [1.3 mm/min])	ASTM D882	30,000 psi	207 MPa
Haze	ASTM D1003	5.0%	5.0%
Specular Gloss (45°)	ASTM D2457	71.0	71.0

PROCESSING CONDITIONS OF EVALUATED FILM

Property	English value	SI value
Die Diameter	7.87 in	200 mm
Die Gap	39 mils	1.0 mm
Blow-up Ratio, BUR	2.5 ---	2.5 ---

NOTES

1. 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.