CNERGIZ POLYMERS | LLDPE 218-W4

Linear Low Density Polyethylene

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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	CHARACTERISTICS	APPLICATIONS
Blown Film (Co)Extrusion Cast Film (Co)Extrusion	Toughness and Strength Sealing Properties	Cast Stretch Film Packaging Blown Films

RESIN PROPERTIES

PROPERTY	TEST METHOD	ENGLISH UNITS	INTERNATIONAL UNITS
Melt Flow Rate 2.16 kgf/190°C MFR_2	ASTM D1238	**2.0 g/10 min**	**2.0 g/10 min**
Density 23°C	ASTM D1505	**0.918 g/cm³**	**0.918 g/cm³**
Slip	---	**1,500 ppm**	**1,500 ppm**
Antiblock	---	**6,300 ppm**	**6,300 ppm**
Antioxidant Package	---	**Yes**	**Yes**

FILM PROPERTIES *

FILM PROPERTIES *	TEST METHOD	DIR	ENGLISH UNITS	INTERNATIONAL UNITS
Evaluated Film Thickness	---		**1.0 mils**	**25.4 µm**
Dart Impact Strength	ASTM D1709A		**100 g**	**100 g**
■ *38.0 mm (1.5 in), 0.66 m (26.0 in), F50*				
Elmendorf Tear Strength	ASTM D1922	MD	**110 g**	**110 g**
		TD	**330 g**	**330 g**
Tensile Strength at Yield	ASTM D882	MD	**1,500 psi**	**10 MPa**
20.0 in/min (508 mm/min)		TD	**1,500 psi**	**10 MPa**
Tensile Strength at Break	ASTM D882	MD	**4,600 psi**	**32 MPa**
20.0 in/min (508 mm/min)		TD	**3,600 psi**	**25 MPa**
Tensile Elongation at Break	ASTM D882	MD	**660 %**	**660 %**
20.0 in/min (508 mm/min)		TD	**700 %**	**700 %**
Tensile Secant Modulus of Elasticity	ASTM D882	MD	**24,700 psi**	**170 MPa**
1% Elong., 0.051 in/min (1.3 mm/min)		TD	**27,600 psi**	**190 MPa**
Haze	ASTM D1003		**14.0 %**	**14.0 %**
Specular Gloss 45°	ASTM D2457		**43.0**	**43.0**

PROCESSING CONDITIONS OF THE EVALUATED FILM

PROCESSING CONDITIONS OF EVALUATED FILM		ENGLISH UNITS	INTERNATIONAL UNITS
Die Diameter		**4.0 in**	**102 mm**
Die Gap		**100 mils**	**2.5 mm**
Blow-up Ratio, BUR		**2.5**	**2.5**

* The data presented here is true and accurate to the best of our knowledge. 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.