

LLDPE**LLDPE 7047****LINEAR LOW DENSITY POLYETHYLENE (LLDPE)**

This linear low-density polyethylene resin is designed for tubular blown-film extrusion. Films made from this resin exhibit good toughness, high tensile strength, and puncture resistance, and the resin itself contains no slip or antiblocking additives.

Typical Application	Product Characteristics	International Compliance
• Industrial liners • Blown film stretch wrap • Heavy-duty films • Lamination film • General-purpose blown film packaging	• Good toughness and puncture resistance • High tensile strength • No slip or antiblocking agents • Meets food-contact regulatory requirements	• US FDA food-contact regulations • EC food-contact regulations

Film Properties

Properties	Test Method	Typical Value	Unit
Tensile Strength at Break (MD/TD)	ASTM D882	34 / 26	MPa
1% Secant Modulus (MD/TD)	ASTM D882	193 / 221	MPa
Elmendorf Tear (MD/TD)	ASTM D1922	35 / 135	N/mm
Dart Impact, F50	ASTM D1709 A	105	g
Puncture Energy		70	J/mm
Haze	ASTM D1003	11	%
Gloss, 45°	ASTM D2457	65	

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Index (I2.16)	ASTM D1238	1.0	g/10 min
Density	ASTM D792	0.918	g/cm ³
Melting Point		124	°C
Bulk Density	ASTM D1895	0.538	g/cm ³

Processing Guidelines

Typical melt temperatures range from 180°C to 210°C using die gaps of 1.8 mm or greater; actual conditions vary with extrusion equipment, blend ratio with LDPE, and film type. Film properties above are typical of 25 micron gauge blown film extruded at a 2:1 blow-up ratio.

1. This grade code denotes a butene-comonomer LLDPE blown-film resin used industry-wide at the same nominal 1 g/10 min melt index; typical values reported here reflect a representative producer of this grade family rather than a certified per-lot analysis for this specific producer.

2. The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.