

ExxonMobil® LL 1001.32

LL 1001.32 is a butene LLDPE resin. Films made from LL 1001.32 have very good tensile and toughness properties.
Information provided by ExxonMobil Chemical

Physical Properties	Metric	English	Comments
Density	0.918 g/cc	0.0332 lb/in³	ExxonMobil Method
Melt Flow	1.0 g/10 min	1.0 g/10 min	ASTM D1238

Mechanical Properties	Metric	English	Comments
Film Tensile Strength at Yield, MD	7.93 MPa	1150 psi	at 2% offset; ASTM D882
Film Tensile Strength at Yield, TD	7.24 MPa	1050 psi	at 2% offset; ASTM D882
Film Elongation at Break, MD	350 %	350 %	ASTM D882
Film Elongation at Break, TD	810 %	810 %	ASTM D882
Puncture Energy	2.82 J	2.08 ft-lb	ExxonMobil
Elmendorf Tear Strength, MD	0.984 g/micron	25.0 g/mil	ASTM D1922
Elmendorf Tear Strength, TD	22.6 g/micron	575 g/mil	ASTM D1922
Dart Drop	2.95 g/micron	75.0 g/mil	ASTM D1709
Film Tensile Strength at Break, MD	66.0 MPa	9570 psi	ASTM D882
Film Tensile Strength at Break, TD	28.5 MPa	4140 psi	ASTM D882
1% Secant Modulus, MD	108 MPa	15700 psi	ASTM D882
1% Secant Modulus, TD	133 MPa	19300 psi	ASTM D882

Thermal Properties	Metric	English	Comments
Melting Point	121 °C	250 °F	Peak Melting Temperature; ExxonMobil Method
Crystallization Temperature	106 °C	223 °F	ExxonMobil Method

Optical Properties	Metric	English	Comments
Haze	1.7 %	1.7 %	ASTM D1003
Gloss	90 %	90 %	45°; ASTM D2457

Descriptive Properties	
Features	Thermal Stabilizer