

ExxonMobil® LL 1002YB Cast

Product Description: LL 1002YB is an LLDPE resin designed for cast films. It offers high gloss and excellent drawdown in both blown and cast film applications. LL 1002YB may also be used as a blend partner with LDPE resins to improve film properties and processability.

Availability: Africa & Middle East, Asia Pacific, Europe, Latin America, North America and South America

Physical Properties	Metric	English	Comments
Density	0.918 g/cc	0.0332 lb/in ³	ExxonMobil method

Melt Flow	2.0 g/10 min @Load 2.16 kg, Temperature 190 °C	2.0 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238
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Mechanical Properties	Metric	English	Comments
Film Tensile Strength at Yield, MD	7.58 MPa	1100 psi	ASTM D882

Film Tensile Strength at Yield, TD	6.48 MPa	940 psi	ASTM D882
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Film Elongation at Break, MD	420 %	420 %	ASTM D882
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Film Elongation at Break, TD	830 %	830 %	ASTM D882
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Puncture Energy	2.37 J	1.75 ft-lb	ExxonMobil Method
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Elmendorf Tear Strength MD	20 g	20 g	ASTM D1922
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Elmendorf Tear Strength TD	430 g	430 g	ASTM D1922
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Dart Drop Test	<= 50.0 g	<= 0.110 lb	ASTM D1709A
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Film Tensile Strength at Break, MD	62.1 MPa	9000 psi	ASTM D882
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Film Tensile Strength at Break, TD	24.8 MPa	3600 psi	ASTM D882
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1% Secant Modulus, MD	117 MPa	17000 psi	ASTM D882
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1% Secant Modulus, TD	131 MPa	19000 psi	ASTM D882
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Thermal Properties	Metric	English	Comments
Melting Point	<= 120 °C	<= 248 °F	Peak Melting Point; ExxonMobil method

Optical Properties	Metric	English	Comments
Haze	1.7 %	1.7 %	ASTM D1003
Gloss	98 %	98 %	45°; ASTM D2457

Descriptive Properties			
Puncture Force	8 lbf		ExxonMobil Method