

ExxonMobil® LD 051.LQ

L Product Description: LD 051.LQ blown film resin is a fractional melt index grade designed for demanding heavy duty film applications, and combines excellent strength properties with outstanding processability.

Physical Properties	Metric	English	Comments
Density	0.919 g/cc	0.0332 lb/in ³	ExxonMobil Method
Thickness	50.8 microns	2.00 mil	
Melt Flow	0.25 g/10 min @Load 2.16 kg, Temperature 190 °C	0.25 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238
Antiblock Level	4000 ppm	4000 ppm	

Mechanical Properties	Metric	English	Comments
Film Tensile Strength at Yield, MD	11.0 MPa	1600 psi	ASTM D882
Film Tensile Strength at Yield, TD	10.3 MPa	1500 psi	ASTM D882
Film Elongation at Break, MD	130 %	130 %	ASTM D882
Film Elongation at Break, TD	570 %	570 %	ASTM D882
Elmendorf Tear Strength MD	280 g	280 g	ASTM D1922
Elmendorf Tear Strength TD	120 g	120 g	ASTM D1922
Dart Drop Test	190 g	0.419 lb	ASTM D1709
Film Tensile Strength at Break, MD	25.5 MPa	3700 psi	ASTM D882
Film Tensile Strength at Break, TD	24.1 MPa	3500 psi	ASTM D882
1% Secant Modulus, MD	186 MPa	27000 psi	ASTM D882
1% Secant Modulus, TD	241 MPa	35000 psi	ASTM D882

Thermal Properties	Metric	English	Comments
Melting Point	109 °C	229 °F	Peak Melting Temperature; ExxonMobil Method

Optical Properties	Metric	English	Comments
Haze	20 %	20 %	ASTM D1003
Gloss	33 %	33 %	45°; ASTM D2457