

ExxonMobil LDPE

LD 051 Series

Shrink Film Resin

Description

LD 051 blown film resins are fractional melt index grades designed for demanding heavy duty film applications, and combine excellent strength properties with outstanding processability.

Applications

- Heavy duty shipping bags
- Shrink film

Additive Package	Antiblock	Slip	Thermal Stabilizer
LD 051.LJ	4000 ppm	500	No
LD 051.LQ	4000 ppm	No	No

Resin Properties	Test Based On	Typical Value / Units	
Melt Index	ExxonMobil Method	0.25 g/10 min	
Density	ExxonMobil Method	0.919 g/cm ³	
Peak Melting Temperature	ExxonMobil Method	110°C	229°F
Crystallization Point	ExxonMobil Method	97°C	205°F
Vicat Softening Point	ASTM D-1525	93°C	199°F

Film Properties¹ (2 mil (50.8 micron) film)

Haze		ASTM D-1003	20.5%	
Gloss, 45°		ASTM D-2457	32	
Yield Strength @ 2% Offset	MD	ASTM D-882	10.7 MPa	1550 psi
	TD		9.9 MPa	1430 psi
Elongation @ Yield	MD	ASTM D-882	6.7%	
	TD		5.0%	
Tensile Strength	MD	ASTM D-882	25.3 MPa	3670 psi
	TD		24.3 MPa	3530 psi
Elongation @ Break	MD	ASTM D-882	130%	
	TD		590%	
1% Secant Modulus	MD	ASTM D-882	186 MPa	27000 psi
	TD		244 MPa	35500 psi
Tear Resistance	MD	ASTM D-1922	330 g	
	TD		120 g	
Dart Drop Impact, F ₅₀		ASTM D-1709	180 g	

1. Film made from LD 051.LQ on a 2.5 inch blown film line having a 6 inch die with a 30 mil die gap at a 2.5:1 blow-up ratio and a melt temperature of 387°F (198°C).

LD 051 resins can - in principle - be used in food contact applications in all EU Member States and in the USA (FDA). Migration or use limitations may apply. Please contact your ExxonMobil Chemical representative for more detailed information and/or actual compliance certification documents for the specific grade of interest.

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