

ExxonMobil LD 051

Low Density Polyethylene for Heavy Duty Film
(Formerly LTA-041 and LTA-051)

LD 051 blown film grade is fractional melt index grade designed for demanding heavy duty film applications, and combines excellent strength properties with outstanding processability. This resin is available with additive packages for applications ranging from heavy duty shipping bags to shrink film.

Resin and Film Properties (2.0 mil) ¹	Test Based On	Units	Typical Value ²
Melt Index	ASTM D-1238	g/10 min	0.25
Density	ASTM D-1505	g/cm ³	0.918
Tensile Modulus (1% secant)	ASTM D-882	psi	25,000/30,000*
Yield Strength	ASTM D-882	psi	1800/1800*
Break Strength	ASTM D-882	psi	4600/2900*
Break Elongation	ASTM D-882	%	200/600*
Elmendorf Tear	ASTM D-1922	grams	600/150*
Dart Impact, F ₅₀	ASTM D-1709(A)	grams	260

* MD/TD

1. Values are typical and should not be interpreted as specifications.
2. Values may vary slightly for resins with additives

Recommended Processing Conditions

Melt Temperature, °F	370-430
Blow-Up Ratio	2.0-3.0:1
Die Gap, mils	25-40
Minimum Gauge, mils	1.5

FDA Status

LD 051 complies with FDA Regulations 21 CFR 177.1520 (c) 2.1 "Olefin polymers" and may be used in articles that are intended to contact foods except during cooking. Contact your ExxonMobil representative for additional information.