

TECHNICAL DATA SHEET (TDS)

LLDPE LL1-18 LINEAR LOW DENSITY POLYETHYLENE

OVERVIEW: Butene copolymer.

Toughness and strength.

Applications: trash bags, garment film, bags on roll.

Complies with U.S FDA 21 CFR 177.1520 (C) 3.2a.

ADDITIVE: Antiblock: Yes Slip: Yes Processing Antioxidant: Yes

Properties Test Method Units Nominal Values Melt Index (190° C/2.16 Kg) ASTM D1238 g/10min 1.0 Density ASTM D792 g/cm³ 0.918 Film Properties Tensile strength at yield MD ASTM D882 Psi/MPa 1600/11 Tensile strength at yield TD ASTM D882 Psi/MPa 7100/49 Tensile strength MD ASTM D882 Psi/MPa 4900/34 Elongation tD ASTM D882 Psi/MPa 4900/34 Elongation MD ASTM D882 % 540 Elongation TD ASTM D882 Psi/MPa 29000/200 1% Secant Modulus MD ASTM D882 Psi/MPa 33400/230 Dart Drop Impact (F ₅₀) ASTM D882 Psi/MPa 33400/230 Haze ASTM D1003 % 11 Gloss (45°) ASTM D2457 56				
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Elongation TD ASTM D882 % 830 1% Secant Modulus MD ASTM D882 Psi/MPa 29000/200 1% Secant Modulus TD ASTM D882 Psi/MPa 33400/230 Dart Drop Impact (F ₅₀) ASTM D1009/A g 100 Haze ASTM D1003 % 11	Tensile strength TD	ASTM D882	Psi/MPa	4900/34
1% Secant Modulus MD ASTM D882 Psi/MPa 29000/200 1% Secant Modulus TD ASTM D882 Psi/MPa 33400/230 Dart Drop Impact (F ₅₀) ASTM D1709/A g 100 Haze ASTM D1003 % 11	Elongation MD	ASTM D882	%	540
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Elongation TD	ASTM D882	%	830
Dart Drop Impact (F ₅₀) ASTM D1709/A g 100 Haze ASTM D1003 % 11	1% Secant Modulus MD	ASTM D882	Psi/MPa	29000/200
Dart Drop Impact (F_{50})D1709/Ag100HazeASTM D1003%11	1% Secant Modulus TD	ASTM D882	Psi/MPa	33400/230
	Dart Drop Impact (F ₅₀)	_	g	100
Gloss (45°) ASTM D2457 56	Haze	ASTM D1003	%	11
	Gloss (45°)	ASTM D2457		56

Film properties are typical of blown film extruded on a 2.5' extruder with 4' die and 100-mildie gap at a blow up ratio of 2, 5:1. But are dependent upon operating conditions.

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