mLLDPE

mLLDPE Exceed m 3518

METALLOCENE LINEAR LOW-DENSITY POLYETHYLENE (mLLDPE)

This grade is an ethylene 1-hexene copolymer metallocene linear low-density polyethylene resin. Films made from this resin exhibit outstanding tensile properties along with impact and puncture toughness. These superior properties, combined with excellent drawability, make it versatile for both monolayer and multilayer cast packaging film.

Typical Application	Product Characteristics	International Compliance
• Bag in Box • Barrier Food Packaging • Blown Film • Cast Film • Cast Stretch Film • Diaper Backsheet • Food Packaging • Form Fill And Seal Packaging • Hygiene Film • Packaging Films • Personal Care	• Formulated without antiblock or slip additive; thermal stabilizer included as standard	• FDA 21 CFR 177.1520 (food-contact) — compliance documented at the producer level; written Statement of Compliance supplied per lot at order

Film Properties

Properties	Test Method	Typical Value	Unit
Tensile Strength at Yield MD	ASTM D882	8.3	MPa
Tensile Strength at Yield TD	ASTM D882	7.6	MPa
Tensile Strength at Break MD	ASTM D882	70	MPa
Tensile Strength at Break TD	ASTM D882	47	MPa
Elongation at Break MD	ASTM D882	510	%
Elongation at Break TD	ASTM D882	680	%
Secant Modulus MD - 1% Secant	ASTM D882	110	MPa
Secant Modulus TD - 1% Secant	ASTM D882	120	MPa
Dart Drop Impact	ASTM D1709A	140	g
Elmendorf Tear Strength MD	ASTM D1922	190	g
Elmendorf Tear Strength TD	ASTM D1922	500	g
Puncture Force		47	N
Puncture Energy		4.3	J
Gloss (45°)	ASTM D2457	86	
Haze	ASTM D1003	2.4	%

Physical Properties

Properties	Test Method	Typical Value	Unit
Density / Specific Gravity	ASTM D792	0.918	g/cm³
Melt Index (190°C/2.16 kg)	ASTM D1238	3.5	g/10 min
Peak Melting Temperature		114	°C

Processing Guidelines

Film (0.8 mil / 20 micron) produced on a 3.5 inch cast line with a 5.5 inch melt curtain length, a 530-590°F (277-310°C) melt temperature, an 80°F chill roll temperature, at a line speed of 750 fpm.

The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.