

ExxonMobil™ LDPE LD 503.LP

Low Density Polyethylene Resin

Product Description

ExxonMobil™ LD 503.LP is an LDPE homopolymer resin that is suitable for use in molding, extrusion, compounding and foam applications.

General

Additive	▪ Antiblock: No	▪ Slip: 200 ppm	▪ Thermal Stabilizer: No
Applications	▪ Foams	▪ Injection Molding	
Form(s)	▪ Pellets		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.919 g/cm ³	0.919 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	2.3 g/10 min	2.3 g/10 min	ASTM D1238
Peak Melting Temperature	230 °F	110 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	189 °F	87 °C	ASTM D1525

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield	1700 psi	12 MPa	ASTM D638
Tensile Strength at Break	1400 psi	9.8 MPa	ASTM D638
Elongation at Yield	20 %	20 %	ASTM D638
Elongation at Break	310 %	310 %	ASTM D638
Flexural Modulus - 1% Secant	31000 psi	220 MPa	ASTM D790
Durometer Hardness			ASTM D2240
Shore A, 15 sec	94	94	
Shore D, 15 sec	43	43	

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Instrumented Dart Impact			ASTM D3763
-40°F (-40°C)	16 ft-lb	22 J	
73°F (23°C)	13 ft-lb	18 J	

