

ExxonMobil™ LLDPE LL 1002YB Wire & Cable

Linear Low Density Polyethylene Resin

Product Description

LL 1002YB is a C4 Ziegler Natta LLDPE for Low Voltage power cable and Telecom jacketing. The grade contains a higher level of antioxidants and has excellent Environmental Stress Crack Resistance (ESCR). Sufficient Carbon Black or UV stabilizer should be added to meet cable jacketing specifications.

General

Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: Yes
Applications	▪ Halogen-free flame retardant (HFFR) compounds ▪ LV silane cross-linkable insulation - 2-step process ▪ LV thermoplastic jacketing ▪ MV/HV thermoplastic jacketing ▪ Telecom thermoplastic jacketing		
Form(s)	▪ Pellets		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.918 g/cm ³	0.918 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Peak Melting Temperature	250 °F	121 °C	ExxonMobil Method

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	2500 psi	17 MPa	ASTM D638
Elongation at Yield	20 %	20 %	ASTM D638
Elongation at Break	700 %	700 %	ASTM D638
Flexural Modulus - 1% Secant	44000 psi	300 MPa	ASTM D790
Durometer Hardness (Shore D, 15 sec)	48	48	ASTM D2240

Electrical	Typical Value (English)	Typical Value (SI)	Test Based On
Volume Resistivity	> 1.0E+16 ohms·cm	> 1.0E+16 ohms·cm	ASTM D257
Dielectric Constant (60 Hz)	2.2	2.2	ASTM D150
Dissipation Factor (60 Hz)	< 1E-4	< 1E-4	ASTM D150

