

ExxonMobil™ LLDPE LL 4004EL Wire&Cable

Linear Low Density Polyethylene Resin

Product Description

LL 4004EL is a C4 Ziegler Natta LLDPE, especially designed for Low Voltage power cable insulation, using either the one-step or two-step silane cross-linking process. Sufficient antioxidant + Cu-inhibitor should be added to meet specific ageing requirements.

General

Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: Yes
Applications	▪ Halogen-free flame retardant (HFFR) compounds ▪ LV silane cross-linkable insulation - 1 step process ▪ LV silane cross-linkable insulation - 2-step process ▪ Telecom thermoplastic jacketing		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.924 g/cm ³	0.924 g/cm ³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	3.5 g/10 min	3.5 g/10 min	ASTM D1238
Peak Melting Temperature	255 °F	124 °C	ExxonMobil Method

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield	2300 psi	16 MPa	ASTM D638
Tensile Strength at Break	1600 psi	11 MPa	ASTM D638
Elongation at Yield	10 %	10 %	ASTM D638
Elongation at Break	610 %	610 %	ASTM D638
Flexural Modulus - 1% Secant	64000 psi	440 MPa	ASTM D790
Durometer Hardness (Shore D, 15 sec)	52	52	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)	2.3	2.3	ASTM D150
Dissipation Factor (60 Hz)	< 4E-4	< 4E-4	ASTM D150

