ExxonMobil™ LLDPE LL 1004YB Wire & Cable

Linear Low Density Polyethylene Resin

Product Description

LL 1004YB is a C4 Ziegler Natta LLDPE, especially designed for Low Voltage power cable insulation, using the two-step silane cross-linking process. The grade contains a higher level of antioxidants and has excellent Environmental Stress Crack Resistance (ESCR). Sufficient Cu-inhibitor should be added to meet specific aging requirements for insulation. For jacketing applications, addition of Carbon Black or UV stabilizer is required.

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	
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		
Form(s)	▪ Pellets		
Revision Date	▪ 02/01/2014		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.918	g/cm³	0.918	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	2.8	g/10 min	2.8	g/10 min	ASTM D1238
Peak Melting Temperature	248	°F	120	°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	2000	psi	14	MPa	ASTM D638
Elongation at Yield	20	%	20	%	ASTM D638
Elongation at Break	690	%	690	%	ASTM D638
Flexural Modulus - 1% Secant	45000	psi	310	MPa	ASTM D790
Durometer Hardness (Shore D, 15 sec)	47		47		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)	< 4E-4		< 4E-4		ASTM D150

Legal Statement

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

This product is not intended for use in medical applications and should not be used in any such applications.

Processing Statement

Specimens were compression molded in accordance with ASTM D 4703, Procedure C.

Notes

Typical properties: these are not to be construed as specifications.

[1] Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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