

ExxonMobil™ LLDPE LL 1002AY Wire & Cable

Linear Low Density Polyethylene Resin

Product Description

LL 1002AY 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. TnPP is not intentionally added to LL 1002AY resin.

General

Availability ¹	▪ Asia Pacific	▪ Europe	▪ Latin America
Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: Yes
Applications	<ul style="list-style-type: none"> ▪ 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		
Revision Date	▪ 06/30/2016		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density / Specific Gravity	0.918 g/cm ³	0.918 g/cm ³	ASTM D792
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

Legal Statement

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

Tris(nonylphenol)phosphite (TNPP) CAS# 26523-78-4 is not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for its presence, based on product composition knowledge this substance is not expected to be present. However, the fact that this substance is not intentionally used by ExxonMobil in this product does not exclude that trace levels of this substance may be present as a result of the specific characteristics of the raw materials and/or of the manufacturing process.

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

Processing Statement

Specimens were compression molded in accordance with ASTM D4703. The value listed as Density, ASTM D1505, was tested in accordance with EMC test methods. Dielectric Strength, ASTM D149, 500V/sec, Compression Molded: 1400 V/mil

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.

ExxonMobil™ LLDPE LL 1002AY Wire & Cable
Linear Low Density Polyethylene Resin

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

©2024 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com