

ExxonMobil™ LLDPE LL 1001AV Wire & Cable

Linear Low Density Polyethylene Resin

Product Description

LL 1001AV is a C4 Ziegler Natta LLDPE for power cable and Telecom jacketing. The grade contains a low 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 1001AV resin.

General

| | | | |
|---------------------------|---|--|---|
| Availability ¹ | <ul style="list-style-type: none"> Africa & Middle East Asia Pacific | <ul style="list-style-type: none"> Europe Latin America | <ul style="list-style-type: none"> North America |
| Additive | <ul style="list-style-type: none"> Antiblock: No | <ul style="list-style-type: none"> Slip: No | <ul style="list-style-type: none"> Thermal Stabilizer: Yes |
| Applications | <ul style="list-style-type: none"> Halogen-free flame retardant (HFFR) compounds LV thermoplastic jacketing | <ul style="list-style-type: none"> MV/HV thermoplastic jacketing Telecom thermoplastic jacketing | |
| Form(s) | <ul style="list-style-type: none"> Pellets | | |
| Revision Date | <ul style="list-style-type: none"> 06/20/2016 | | |

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) | 1.0 g/10 min | 1.0 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 | 3000 psi | 21 MPa | ASTM D638 |
| Elongation at Yield | 20 % | 20 % | ASTM D638 |
| Elongation at Break | 820 % | 820 % | ASTM D638 |
| Flexural Modulus - 1% Secant | 45000 psi | 310 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 | 2.2 | 2.2 | ASTM D150 |
| Dissipation Factor | < 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).

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.

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 D4703. The value listed as Density, ASTM D1505, was tested in accordance with EMC test methods. Dielectric Strength, ASTM D149, 500V/sec, Compression Molded: 1330 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.

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

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