Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ C4LL 2818.AY Wire & Cable

C4 Linear Low Density Polyethylene

Product Description

ExxonMobil™ C4LL 2818.AY is an ethylene 1-butene copolymer resin, 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 ageing requirements for insulation. For jacketing applications, addition of Carbon Black or UV stabilizer is required. TnPP is not intentionally added to ExxonMobil™ C4LL 2818.AY resin.

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	▪ 06/30/2016		

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

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 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.

Manufacturer website: https://www.exxonmobilchemical.com/en/products/polyethylene

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