

Enable™ 3505MC Wire & Cable

Performance Polymer

Product Description

Enable™ 3505MC performance polymer resin is an ethylene 1-hexene copolymer. It can be employed in medium and high density jacketing. It has a good balance of mechanical strength, abrasion and strong environmental stress crack resistance (ESCR). Sufficient carbon black or UV stabilizer should be added to meet cable jacketing specifications.

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"> Thermal Stabilizer: Yes 		
Applications	<ul style="list-style-type: none"> Communication Cable High Voltage Jacketing 	<ul style="list-style-type: none"> Low Voltage Jacketing Medium Voltage Jacketing 	
Form(s)	<ul style="list-style-type: none"> Pellets 		
Revision Date	<ul style="list-style-type: none"> 06/03/2020 		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density / Specific Gravity	0.935 g/cm ³	0.935 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	0.50 g/10 min	0.50 g/10 min	ASTM D1238
Peak Melting Temperature	254 °F	123 °C	ExxonMobil Method

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	247 °F	120 °C	ExxonMobil Method

Molded Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield 2.0 in/min (50 mm/min)	2800 psi	19 MPa	ExxonMobil Method
Tensile Strength at Break 2.0 in/min (50 mm/min)	5700 psi	39 MPa	ExxonMobil Method
Elongation at Yield (2.0 in/min (51 mm/min))	10 %	10 %	ExxonMobil Method
Elongation at Break (2.0 in/min (50 mm/min))	790 %	790 %	ExxonMobil Method
Flexural Modulus - 1% Secant Procedure A, 0.051 in/min (1.3 mm/min)	80000 psi	550 MPa	ExxonMobil Method
Environmental Stress-Crack Resistance Condition B, 10% Igepal, F50	> 1000 hr	> 1000 hr	ExxonMobil Method
Durometer Hardness (Shore D, 15 sec)	54	54	ExxonMobil Method

Electrical

	Typical Value (English)	Typical Value (SI)	Test Based On
Volume Resistivity (500 V)	7.5E+14 ohms-m	7.5E+14 ohms-m	IEC 62631-3-1
Relative Permittivity (1 MHz)	2.28	2.28	IEC 62631-2-1
Dissipation Factor (1 MHz)	1.3E-4	1.3E-4	IEC 62631-2-1

Legal Statement

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.

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

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Processing Statement

All physical properties were measured on compression molded specimens.

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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