Product Datasheet

ExxonMobil Signature Polymers

Exceed™ m 3518.CB Wire & Cable

Metallocene Polyethylene

Product Description

Exceed™ m 3518.CB metallocene polyethylene resin is an ethylene 1-hexene copolymer. It is an excellent blend partner in halogen-free flame retardant compounds and cable jacketing to boost mechanical properties such as tensile strength, elongation, tear and crack resistance. These superior mechanical properties protect the cable in various working conditions. Sufficient carbon black or UV stabilizer should be added to meet cable jacketing specifications.

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	▪ North America
Additive	▪ Thermal Stabilizer: Yes		
Applications	▪ Communication Cable ▪ Halogen-free flame retardant (HFFR) compounds	▪ High Voltage Jacketing ▪ Low Voltage Jacketing	▪ Medium Voltage Jacketing
Form(s)	▪ Pellets		
Revision Date	▪ 04/01/2019		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density / Specific Gravity	0.918	g/cm³	0.918	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	3.5	g/10 min	3.5	g/10 min	ASTM D1238
Peak Melting Temperature	237	°F	114	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	221	°F	105	°C	ASTM D1525

Molded Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield					ASTM D638
20 in/min (510 mm/min)	1700	psi	12	MPa	
Tensile Strength at Break					ASTM D638
20 in/min (510 mm/min)	4300	psi	30	MPa	
Elongation at Yield (20 in/min (510 mm/min))	10	%	10	%	ASTM D638
Elongation at Break (20 in/min (510 mm/min))	700	%	700	%	ASTM D638
Flexural Modulus - 1% Secant (0.051 in/min (1.3 mm/min))	34000	psi	230	MPa	ASTM D790A
Durometer Hardness (Shore D, 15 sec)	50		50		ASTM D2240

Electrical	Typical Value (English)		Typical Value (SI)		Test Based On
Volume Resistivity (500 V)	1.4E+15	ohms·m	1.4E+15	ohms·m	IEC 62631-3-1
Relative Permittivity (1 MHz)	2.31		2.31		IEC 62631-2-1
Dissipation Factor (1 MHz)	2.3E-4		2.3E-4		IEC 62631-2-1

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.

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

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For additional technical, sales and order assistance: Contact Us

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