

Exceed™ 3812CB Wire & Cable

Performance Polymer

Product Description

Exceed™ 3812CB performance polymer resin is an ethylene 1-hexene copolymer. It is an excellent blend partner in halogen-free flame retardant compounds and cable jacketing to improve flexibility and mechanical properties. These properties protect the cable in various working conditions and provide potential for higher flame retardant filler loading. 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 Halogen-free flame retardant (HFFR) compounds 	<ul style="list-style-type: none"> High Voltage Jacketing Low Voltage Jacketing 	<ul style="list-style-type: none"> 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	0.912 g/cm ³	0.912 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	3.8 g/10 min	3.8 g/10 min	ASTM D1238
Peak Melting Temperature	232 °F	111 °C	ExxonMobil Method

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	201 °F	94.0 °C	ExxonMobil Method

Molded Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Stress	4300 psi	30 MPa	ExxonMobil Method
Tensile Strength at Yield 20 in/min (510 mm/min)	1500 psi	10 MPa	ExxonMobil Method
Elongation at Yield (20 in/min (510 mm/min))	80 %	80 %	ExxonMobil Method
Elongation at Break ² (20 in/min (510 mm/min))	> 800 %	> 800 %	ExxonMobil Method
Flexural Modulus - 1% Secant Procedure A, 0.051 in/min (1.3 mm/min)	27000 psi	190 MPa	ExxonMobil Method
Durometer Hardness (Shore D, 15 sec)	44	44	ExxonMobil Method

Electrical

	Typical Value (English)	Typical Value (SI)	Test Based On
Volume Resistivity (500 V)	9.4E+14 ohms-m	9.4E+14 ohms-m	IEC 62631-3-1
Relative Permittivity (1 MHz)	2.27	2.27	IEC 62631-2-1
Dissipation Factor (1 MHz)	2.5E-4	2.5E-4	IEC 62631-2-1

Legal Statement

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).

Processing Statement

All physical properties were measured on compression molded specimens.

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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.

² The specimens did not break. Equipment reached maximum elongation.

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