

Ryton® XE3500BL

polyphenylene sulfide alloy

Ryton® XE3500BL unfilled polyphenylene sulfide alloy compound for extrusion and blow molding provides

excellent mechanical strength, ductility, toughness and chemical resistance.

General

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> • Asia Pacific • Europe • Latin America • North America
Features	<ul style="list-style-type: none"> • Chemical Resistant • Ductile • Good Toughness • High Strength
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Forms	• Pellets

Physical	Typical Value	Unit	Test method
Density	1.20	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) ¹ (316°C/5.0 kg)	1.0	g/10 min	ASTM D1238
Water Absorption (24 hr, 23°C)	0.10	%	ASTM D570
Mold Shrinkage ²	2.10	%	

Mechanical	Typical Value	Unit	Test method
Tensile Modulus	1500	MPa	ISO 527
Tensile Strength	40.0	MPa	ISO 527
Tensile Elongation (Break)	80	%	ISO 527
Flexural Modulus	1500	MPa	ISO 178
Flexural Strength	60.0	MPa	ISO 178

Impact	Typical Value	Unit	Test method
Notched Izod Impact Strength	50	kJ/m ²	ISO 180/A

Thermal	Typical Value	Unit	Test method
Thermal Conductivity	0.20	W/m/K	ASTM E1530
Coefficient of Linear Thermal Expansion			ISO 11359-2
-50 to 50°C	8.0E-5	cm/cm/°C	
100 to 200°C	1.5E-4	cm/cm/°C	
Heat Deflection Temperature			ASTM D648
0.45 MPa	110	°C	
1.8 MPa	90	°C	

Electrical	Typical Value	Unit	Test method
Dielectric Strength	24	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
25°C, 1 kHz	3.10		
25°C, 1 MHz	3.10		

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Electrical	Typical Value	Unit	Test method
Dissipation Factor			ASTM D150
25°C, 1 kHz	2.0E-3		
25°C, 1 MHz	5.0E-3		
Arc Resistance	120	sec	ASTM D495

Flammability	Typical Value	Unit	Test method
Flame Rating ³ (1.6 mm)	V-1		UL 94

Extrusion Notes

Storage:

Bags should be preferably stored in a dry room at a maximum temperature of 60°C (140°F) and should be protected from possible damage.

Pre-Drying:

This resin should be dried prior to extrusion following the recommendations found in the processing guide.

Notes

Typical properties: these are not to be construed as specifications.

¹ Procedure B

² Measured on 102 mm x 102 mm x 3.2 mm plaques, edge gated.

³ This product is not currently UL listed; test results indicate this level of performance.



Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

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