

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	• Asia Pacific • Europe	• Latin America • North America
Features	• Chemical Resistant • Ductile	• Good Toughness • High Strength
RoHS Compliance	• RoHS Compliant	
Appearance	• Black	
Forms	• Pellets	
ISO Designation	• PPS-I	

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	1600	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	60	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	



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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		
Dissipation Factor			ASTM D150
25°C, 1 kHz	2.0E-3		
25°C, 1 MHz	5.0E-3		
Arc Resistance	120	sec	ASTM D495

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.

