

# Ryton® XE3500BL

## Syensqo - Polyphenylene Sulfide Alloy

### General Information

#### Product Description

Ryton® XE3500BL unfilled polyphenylene sulfide alloy compound for extrusion and blow molding provides excellent mechanical strength, ductility, toughness and chemical resistance.

#### General

Features	<ul style="list-style-type: none"> <li>• Chemical Resistant</li> <li>• Ductile</li> </ul>	<ul style="list-style-type: none"> <li>• Good Toughness</li> <li>• High Strength</li> </ul>
RoHS Compliance	<ul style="list-style-type: none"> <li>• RoHS Compliant</li> </ul>	
Appearance	<ul style="list-style-type: none"> <li>• Black</li> </ul>	
Forms	<ul style="list-style-type: none"> <li>• Pellets</li> </ul>	
ISO Designation	<ul style="list-style-type: none"> <li>• PPS-I</li> </ul>	

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) <sup>2</sup> (316°C/5.0 kg)	1.0	g/10 min	ASTM D1238
Water Absorption (24 hr, 73°F)	0.10	%	ASTM D570
Mold Shrinkage <sup>3</sup>	2.10	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	232000	psi	ISO 527
Tensile Strength	5800	psi	ISO 527
Tensile Elongation (Break)	80	%	ISO 527
Flexural Modulus	218000	psi	ISO 178
Flexural Strength	8700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength	29	ft-lb/in <sup>2</sup>	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Thermal Conductivity	1.4	Btu-in/hr/ft <sup>2</sup> /°F	ASTM E1530
Coefficient of Linear Thermal Expansion			ISO 11359-2
-58 to 122°F	4.4	in <sup>-5</sup> /in/°F	
212 to 392°F	8.3	in <sup>-5</sup> /in/°F	
Heat Deflection Temperature			ASTM D648
0.45 MPa	230	°F	
1.8 MPa	194	°F	
Electrical	Nominal Value	Unit	Test Method
Dielectric Strength	610	V/mil	ASTM D149
Dielectric Constant			ASTM D150
77°F, 1 kHz	3.10		
77°F, 1 MHz	3.10		
Dissipation Factor			ASTM D150
77°F, 1 kHz	2.0E-3		
77°F, 1 MHz	5.0E-3		
Arc Resistance	120	sec	ASTM D495

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### Processing Information

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#### Extrusion Notes

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**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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

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<sup>2</sup> Procedure B

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<sup>3</sup> Measured on 102 mm x 102 mm x 3.2 mm plaques, edge gated.