



## Technical Data Sheet

# Ryton® XE5430BL

## polyphenylene sulfide alloy

Ryton® XE5430BL 30% glass fiber reinforced polyphenylene sulfide alloy compound provides high ductility and impact resistance along with good thermal stability.

### General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber
Features	• Chemical Resistant • Ductile • Good Toughness • High Strength
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Forms	• Pellets

Physical	Typical Value	Unit	Test method
Density <sup>1</sup>	1.52	g/cm <sup>3</sup>	ISO 1183
Water Absorption (24 hr, 23°C)	0.020	%	ASTM D570
Mold Shrinkage <sup>2</sup>			
Flow	0.20	%	
Transverse	0.60	%	

Mechanical	Typical Value	Unit	Test method
Tensile Strength	150	MPa	ISO 527
Tensile Elongation (Break)	2.1	%	ISO 527
Flexural Modulus	9000	MPa	ISO 178
Flexural Strength	220	MPa	ISO 178
Compressive Strength	215	MPa	ISO 604

Impact	Typical Value	Unit	Test method
Notched Izod Impact Strength	11	kJ/m <sup>2</sup>	ISO 180/A
Unnotched Izod Impact Strength	55	kJ/m <sup>2</sup>	ISO 180

Thermal	Typical Value	Unit	Test method
CLTE			ISO 11359-2
Flow : -50 to 50°C	2.0E-5	cm/cm/°C	
Flow : 100 to 200°C	1.0E-5	cm/cm/°C	
Transverse : -50 to 50°C	5.5E-5	cm/cm/°C	
Transverse : 100 to 200°C	9.0E-5	cm/cm/°C	
Thermal Conductivity	0.27	W/m/K	ASTM E1530
Heat Deflection Temperature - 1.8 MPa	255	°C	ASTM D648

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Electrical	Typical Value	Unit	Test method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	20	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
25°C, 1 kHz	3.70		
25°C, 1 MHz	3.70		
Dissipation Factor			ASTM D150
25°C, 1 kHz	2.0E-3		
25°C, 1 MHz	2.0E-3		
Arc Resistance	125	sec	ASTM D495
Comparative Tracking Index	175	V	IEC 60112

Flammability	Typical Value	Unit	Test method
Flame Rating <sup>3</sup> (1.6 mm)	V-0		UL 94

## Additional Information

Test specimen molding conditions: Stock temperature, 315-345°C; Mold temperature, 135°C

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## Notes

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

<sup>1</sup> Method A

<sup>2</sup> Measured on 102 mm x 102 mm x 3.2 mm plaques, edge gated.

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

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[SpecialtyPolymers.EMEA@solvay.com](mailto:SpecialtyPolymers.EMEA@solvay.com) | Europe, Middle East and Africa

[SpecialtyPolymers.Americas@solvay.com](mailto:SpecialtyPolymers.Americas@solvay.com) | Americas

[SpecialtyPolymers.Asia@solvay.com](mailto:SpecialtyPolymers.Asia@solvay.com) | Asia and Australia

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