

Ryton® XE5030BL

polyphenylene sulfide alloy

Ryton® XE5030BL 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, 30% Filler by Weight	
Features	• Ductile • Good Thermal Stability	• High Impact Resistance
Uses	• Industrial Applications	
RoHS Compliance	• RoHS Compliant	
Appearance	• Black	
Forms	• Pellets	

Physical	Typical Value	Unit	Test method
Density / Specific Gravity	1.51		ASTM D792
Molding Shrinkage			
Flow : 3.20 mm	0.20	%	
Across Flow : 3.20 mm	0.60	%	
Water Absorption (24 hr, 23°C)	0.050	%	ASTM D570

Mechanical	Typical Value	Unit	Test method
Tensile Modulus	10100	MPa	ISO 527-1
Tensile Stress	142	MPa	ISO 527-2
Tensile Strain (Break)	2.0	%	ISO 527-2
Flexural Modulus	9000	MPa	ISO 178
Flexural Stress	205	MPa	ISO 178
Compressive Strength	210	MPa	ASTM D695
Poisson's Ratio	0.38		ISO 527

Impact	Typical Value	Unit	Test method
Charpy Notched Impact Strength	9.0	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength	50	kJ/m ²	ISO 179/1eU
Notched Izod Impact Strength	10	kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength	48	kJ/m ²	ISO 180/1U

Hardness	Typical Value	Unit	Test method
Rockwell Hardness			ASTM D785
M-Scale	86		
R-Scale	110		



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Thermal	Typical Value	Unit	Test method
Deflection Temperature Under Load 1.8 MPa, Unannealed	250	°C	ASTM D648
CLTE			ASTM E831
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	

Electrical	Typical Value	Unit	Test method
Surface Resistivity	1.0E+16	ohms	ASTM D257
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength	22	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
25°C, 1 kHz	3.80		
25°C, 1 MHz	3.70		
Dissipation Factor			ASTM D150
25°C, 1 kHz	3.0E-3		
25°C, 1 MHz	9.0E-3		
Arc Resistance	124	sec	ASTM D495
Comparative Tracking Index	100	V	IEC 60112
Insulation Resistance ¹ (90°C)	1.0E+11	ohms	

Flammability	Typical Value	Unit	Test method
Flame Rating (1.6 mm)	V-0		UL 94
Oxygen Index	34	%	ASTM D2863

Injection	Typical Value	Unit
Drying Temperature	85	°C
Drying Time	4.0 to 6.0	hr
Rear Temperature	295 to 305	°C
Middle Temperature	300 to 310	°C
Front Temperature	305 to 315	°C
Nozzle Temperature	305 to 315	°C
Processing (Melt) Temp	310 to 320	°C
Mold Temperature	135 to 150	°C

Notes

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

¹ 95%RH, 48 hr

