



Ryton® XE5030BL

Syensqo - Polyphenylene Sulfide Alloy

General Information

Product Description

Ryton® XE5030BL 30% glass fiber reinforced polyphenylene sulfide alloy compound provides high ductility and impact resistance along with good thermal stability.

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.51		ASTM D792
Molding Shrinkage - Flow (0.126 in)	2.0E-3	in/in	
Molding Shrinkage - Across Flow (0.126 in)	6.0E-3	in/in	
Water Absorption (24 hr, 73°F)	0.050	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.46E+6	psi	ISO 527-1
Tensile Stress	20600	psi	ISO 527-2
Tensile Strain (Break)	2.0	%	ISO 527-2
Flexural Modulus	1.31E+6	psi	ISO 178
Flexural Stress	29700	psi	ISO 178
Compressive Strength	30500	psi	ASTM D695
Poisson's Ratio	0.38		ISO 527
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	4.3	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength	24	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact Strength	4.8	ft·lb/in ²	ISO 180/1A
Unnotched Izod Impact Strength	23	ft·lb/in ²	ISO 180/1U
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ASTM D785
M-Scale	86		
R-Scale	110		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	482	°F	
CLTE - Flow			ASTM E831
-58 to 122°F	1.1E-5	in/in/°F	
212 to 392°F	5.6E-6	in/in/°F	

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Thermal	Nominal Value	Unit	Test Method
CLTE - Transverse			ASTM E831
-58 to 122°F	3.1E-5	in/in/°F	
212 to 392°F	5.0E-5	in/in/°F	
Thermal Conductivity	1.9	Btu·in/hr/ft ² /°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	ASTM D257
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength	560	V/mil	ASTM D149
Dielectric Constant			ASTM D150
77°F, 1 kHz	3.80		
77°F, 1 MHz	3.70		
Dissipation Factor			ASTM D150
77°F, 1 kHz	3.0E-3		
77°F, 1 MHz	9.0E-3		
Arc Resistance	124	sec	ASTM D495
Comparative Tracking Index	100	V	IEC 60112
Insulation Resistance ² (194°F)	1.0E+11	ohms	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94
Oxygen Index	34	%	ASTM D2863

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185	°F
Drying Time	4.0 to 6.0	hr
Rear Temperature	563 to 581	°F
Middle Temperature	572 to 590	°F
Front Temperature	581 to 599	°F
Nozzle Temperature	581 to 599	°F
Processing (Melt) Temp	590 to 608	°F
Mold Temperature	275 to 302	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

² 95%RH, 48 hr