Ryton® XE5500BL
polyphenylene sulfide alloy

Ryton® XE5500BL unfilled polyphenylene sulfide alloy compound for extrusion 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	

Physical	Typical Value	Unit	Test method
Density	1.30	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) [1] (316°C/5.0 kg)	20	g/10 min	ASTM D1238
Molding Shrinkage			ISO 294-4
Across Flow : 3.20 mm	1.3	%	
Flow : 3.20 mm	1.3	%	
Water Absorption			
24 hr, 23°C	0.060	%	ISO 62
24 hr, 23°C	0.10	%	ASTM D570
Saturation, 23°C	0.25	%	Internal Method

Mechanical	Typical Value	Unit	Test method
Tensile Modulus			ISO 527-2
--	2600	MPa	
-- [2]	2660	MPa	
Tensile Stress			ISO 527-2
Yield	59.0	MPa	
Yield [2]	66.0	MPa	
Tensile Strain (Break)	15	%	ISO 527-2
Flexural Modulus	2500	MPa	ISO 178
Flexural Stress	100	MPa	ISO 178

Impact	Typical Value	Unit	Test method
Charpy Notched Impact Strength			ISO 179
--	49	kJ/m²	
-- [2]	44	kJ/m²	
Charpy Unnotched Impact Strength	No Break		ISO 179
Notched Izod Impact Strength	46	kJ/m²	ISO 180/A

Ryton® XE5500BL
polyphenylene sulfide alloy

Thermal	Typical Value	Unit	Test method
Melting Temperature	280	°C	ISO 11357-3
Thermal Conductivity	0.20	W/m/K	ASTM E1530
Coefficient of Linear Thermal Expansion			ISO 11359-2
-50 to 50°C	7.5E-5	cm/cm/°C	
100 to 200°C	1.2E-4	cm/cm/°C	
Heat Deflection Temperature			ASTM D648
0.45 MPa	130	°C	
1.8 MPa	95	°C	

Electrical	Typical Value	Unit	Test method
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength	24	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
25°C, 1 kHz	3.60		
25°C, 1 MHz	3.50		
Dissipation Factor			ASTM D150
25°C, 1 kHz	3.0E-3		
25°C, 1 MHz	9.0E-3		
Arc Resistance	100	sec	ASTM D495
Comparative Tracking Index (CTI) [3]	125	V	UL 746A

Notes

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

[1] Procedure B

[2] Conditioned data is meant to simulate 23°C 50% RH equilibrium values. Conditioning of specimens was achieved per ISO 1110 by exposing specimens for 11 days, 70°C and 62% RH.

[3] This product is not currently UL listed; test results indicate this level of performance.

SYENSQO

www.syensqo.com

Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.