Ryton® XE4500BL

Syensqo - Polyphenylene Sulfide Alloy

General Information

Product Description

Ryton® XE4500BL unfilled polyphenylene sulfide alloy compound for extrusion provides excellent mechanical strength, ductility, toughness and chemical resistance.

General

Features	• Chemical Resistant • Ductile	• Good Toughness • High Strength
RoHS Compliance	• RoHS Compliant	
Appearance	• Black	
Forms	• Pellets	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.25	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) [2] (316°C/5.0 kg)	2.0	g/10 min	ASTM D1238
Water Absorption (24 hr, 73°F)	0.10	%	ASTM D570
Mold Shrinkage [3]	2.00	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	261000	psi	ISO 527
Tensile Strength	6530	psi	ISO 527
Tensile Elongation (Break)	20	%	ISO 527
Flexural Modulus	261000	psi	ISO 178
Flexural Strength	11600	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact Strength	14	ft·lb/in²	ISO 180/A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Thermal Conductivity	1.4	Btu·in/hr/ft²/°F	ASTM E1530
Coefficient of Linear Thermal Expansion			ISO 11359-2
-58 to 122°F	4.2	in^-5/in/°F	
212 to 392°F	7.2	in^-5/in/°F	
Heat Deflection Temperature			ASTM D648
0.45 MPa	248	°F	
1.8 MPa	203	°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	4.0E-3		
Arc Resistance	120	sec	ASTM D495
Comparative Tracking Index (CTI) [4]	150	V	UL 746A