Ryton® XK2340

Syensqo - Polyphenylene Sulfide Alloy

General Information

Product Description

Ryton® XK2340 40% glass fiber reinforced polyphenylene sulfide alloy compound provides excellent mechanical strength, toughness, and rigidity, along with excellent flow in thin-walled parts, low flash characteristics, and fast cycle times. It may be easily molded in conventional injection molding equipment utilizing water heated molds.

General

Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight		
Features	• Fast Molding Cycle • Good Flow	• Good Strength • Good Toughness	• High Rigidity
Uses	• Automotive Applications		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.56		ASTM D792
Molding Shrinkage - Flow (0.126 in)	3.0E-3	in/in	
Molding Shrinkage - Across Flow (0.126 in)	6.0E-3	in/in	
Water Absorption (24 hr, 73°F)	0.30	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	28000	psi	ASTM D638
Tensile Stress	28300	psi	ISO 527-2
Tensile Elongation (Break)	1.8	%	ASTM D638
Tensile Strain (Break)	1.8	%	ISO 527-2
Flexural Modulus	1.80E+6	psi	ASTM D790
Flexural Modulus	1.74E+6	psi	ISO 178
Flexural Strength	37000	psi	ASTM D790
Flexural Stress	39200	psi	ISO 178
Compressive Strength	37000	psi	ASTM D695
Poisson's Ratio	0.42		ISO 527
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (0.125 in)	1.6	ft·lb/in	ASTM D256
Notched Izod Impact Strength	4.0	ft·lb/in²	ISO 180/A
Unnotched Izod Impact (0.125 in)	12	ft·lb/in	ASTM D4812
Unnotched Izod Impact Strength	17	ft·lb/in²	ISO 180
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness			ASTM D785
M-Scale	95		
R-Scale	115		

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	473	°F	
CLTE - Flow			ASTM E831
-58 to 122°F	1.1E-5	in/in/°F	
212 to 392°F	8.3E-6	in/in/°F	
CLTE - Transverse			ASTM E831
-58 to 122°F	3.1E-5	in/in/°F	
212 to 392°F	5.6E-5	in/in/°F	
Thermal Conductivity	2.4	Btu·in/hr/ft²/°F	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+15	ohms	ASTM D257
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength	550	V/mil	ASTM D149
Dielectric Constant			ASTM D150
77°F, 1 kHz	4.30		
77°F, 1 MHz	3.90		
Dissipation Factor			ASTM D150
77°F, 1 kHz	0.020		
77°F, 1 MHz	0.010		
Arc Resistance	100	sec	ASTM D495
Comparative Tracking Index (CTI)	275	V	UL 746A
Insulation Resistance [2] (194°F)	1.0E+12	ohms	
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in, Tested by CP Chemical)	HB		UL 94
Oxygen Index	35	%	ASTM D2863

Notes

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

[2] 95%RH, 48 hr