Eurostar Starflam AFR450X1 PA66, 25% Glass Filled, Injection Molded

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, 30% Glass Fiber Filled

Material Notes:

AFR450X1 is a Red Phosphorous, Flame Retardant, Glass Fiber Reinforced, Polyamide 66 Injection Molding ResinInformation provided by Polymer Technology & Services, the North American exclusive supplier.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Eurostar-Starflam-AFR450X1-PA66-25-Glass-Filled-Injection-Molded.php

Physical Properties	Metric	English	Comments
Density	1.36 g/cc	0.0491 lb/in³	ISO 1183
Moisture Absorption	1.30 % @Temperature 23.0 °C	1.30 % @Temperature 73.4 °F	50% RH; ISO 62
Water Absorption at Saturation	6.0 % @Temperature 23.0 °C	6.0 % @Temperature 73.4 °F	ISO 62-1
Linear Mold Shrinkage, Flow	0.0030 - 0.0050 cm/cm	0.0030 - 0.0050 in/in	on Tensile Bar; ISO 294

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	108	108	ISO 2039-2
Tensile Strength at Break	150 MPa	21800 psi	5 mm/min; ISO 527
Elongation at Break	3.0 %	3.0 %	5 mm/min; ISO 527
Tensile Modulus	8.00 GPa	1160 ksi	1 mm/min; ISO 527
Flexural Strength	210 MPa	30500 psi	2 mm/min; ISO 178
Flexural Modulus	7.50 GPa	1090 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	8.00 kJ/m² @Temperature -40.0 °C	3.81 ft-lb/in² @Temperature -40.0 °F	80x10x4; ISO 180/1A
	9.00 kJ/m² @Temperature -20.0 °C	4.28 ft-lb/in² @Temperature -4.00 °F	80x10x4; ISO 180/1A
	12.0 kJ/m² @Temperature 23.0 °C	5.71 ft-lb/in² @Temperature 73.4 °F	80x10x4; ISO 180/1A
Charpy Impact Unnotched	5.50 J/cm² @Temperature -30.0 °C	26.2 ft-lb/in² @Temperature -22.0 °F	Edgew 80x10x4; ISO 179/1eU
	6.50 J/cm²	30.9 ft-lb/in²	

Mechanical Properties	Metric	English	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	Edgew 80x10x4; ISO 179/1eU
Charpy Impact, Notched	0.800 J/cm² @Temperature -30.0 °C	3.81 ft-lb/in² @Temperature -22.0 °F	Edgew 80x10x4; ISO 179/1eA
	1.10 J/cm² @Temperature 23.0 °C	5.23 ft-lb/in² @Temperature 73.4 °F	Edgew 80x10x4; ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	25.0 µm/m-°C @Temperature 23.0 - 60.0 °C	13.9 µin/in-°F @Temperature 73.4 - 140 °F	ISO 11359-2
CTE, linear, Transverse to Flow	90.0 µm/m-°C @Temperature 23.0 - 60.0 °C	50.0 µin/in-°F @Temperature 73.4 - 140 °F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	250 °C	482 °F	Edgew 120x10x4, sp=100 mm; ISO 75/Bf
Deflection Temperature at 1.8 MPa (264 psi)	230 °C	446 °F	Edgew 120x10x4, sp=100 mm; ISO 75/Af
Vicat Softening Point	240 °C	464 °F	B/120; ISO 306
	240 °C	464 °F	B/50; ISO 306
UL RTI, Electrical	110 °C @Thickness 0.750 mm	230 °F @Thickness 0.0295 in	
	110 °C @Thickness 1.50 mm	230 °F @Thickness 0.0591 in	
	110 °C @Thickness 3.00 mm	230 °F @Thickness 0.118 in	
UL RTI, Mechanical with Impact	110 °C @Thickness 0.750 mm	230 °F @Thickness 0.0295 in	
	110 °C @Thickness 1.50 mm	230 °F @Thickness 0.0591 in	
	110 °C @Thickness 3.00 mm	230 °F @Thickness 0.118 in	
UL RTI, Mechanical without Impact	115 °C @Thickness 0.750 mm	239 °F @Thickness 0.0295 in	

Thermal Properties	Metric	English	Comments
	115 °C @Thickness 1.50 mm	239 °F @Thickness 0.0591 in	
	120 °C @Thickness 3.00 mm	248 °F @Thickness 0.118 in	
Flammability, UL94	V-0 @Thickness 0.750 mm	V-0 @Thickness 0.0295 in	IEC 60695-11-10
	V-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	IEC 60695-11-10
	V-0 @Thickness 3.00 mm	V-0 @Thickness 0.118 in	IEC 60695-11-10
Oxygen Index	28 %	28 %	ISO 4589
Glow Wire Test	960 °C @Thickness 2.00 mm	1760 °F @Thickness 0.0787 in	IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+15 ohm	>= 1.00e+15 ohm	ROA; IEC 60093
Dielectric Constant	2.6 @Frequency 1.00e+6 Hz	2.6 @Frequency 1.00e+6 Hz	IEC 60250
	2.9 @Frequency 50.0 - 60.0 Hz	2.9 @Frequency 50.0 - 60.0 Hz	IEC 60250
Dielectric Strength	16.0 kV/mm @Thickness 3.20 mm	406 kV/in @Thickness 0.126 in	in oil; IEC 60243-1
Dissipation Factor	0.0049 @Frequency 50.0 - 60.0 Hz	0.0049 @Frequency 50.0 - 60.0 Hz	IEC 60250
	0.012 @Frequency 1.00e+6 Hz	0.012 @Frequency 1.00e+6 Hz	IEC 60250
Comparative Tracking Index	400 V	400 V	M; IEC 60112
	550 V	550 V	IEC 60112

Electrical Properties	Metric	English	Comments
	30 - 60 sec @Thickness 0.750 mm	30 - 60 sec @Thickness 0.0295 in	PLC 2
Hot Wire Ignition, HWI	>= 120 sec @Thickness 1.50 mm	>= 120 sec @Thickness 0.0591 in	PLC 0
	>= 120 sec @Thickness 3.00 mm	>= 120 sec @Thickness 0.118 in	PLC 0
High Amp Arc Ignition, HAI	>= 120 arcs @Thickness 0.750 mm	>= 120 arcs @Thickness 0.0295 in	PLC 0
	>= 120 arcs @Thickness 1.50 mm	>= 120 arcs @Thickness 0.0591 in	PLC 0
	>= 120 arcs @Thickness 3.00 mm	>= 120 arcs @Thickness 0.118 in	PLC 0

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	275 - 285 °C	527 - 545 °F	Zone 1
Middle Barrel Temperature	275 - 285 °C	527 - 545 °F	Zone 2
Front Barrel Temperature	275 - 285 °C	527 - 545 °F	Zone 3
Melt Temperature	275 - 285 °C	527 - 545 °F	
Mold Temperature	70.0 - 90.0 °C	158 - 194 °F	
Drying Temperature	75.0 - 85.0 °C	167 - 185 °F	
Dry Time	4.00 - 6.00 hour	4.00 - 6.00 hour	
Moisture Content	0.10 %	0.10 %	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China