

Eurostar Starflam AFR470X2 PA66, 35% Glass Filled, Injection Molded

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, 40% Glass Fiber Filled

Material Notes:

AFR470X2 is a Red Phosphorous, Flame Retardant, Glass Fiber Reinforced, Polyamide 66 Injection Molding Resin. Information provided by Polymer Technology & Services, the North American exclusive supplier.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Eurostar-Starflam-AFR470X2-PA66-35-Glass-Filled-Injection-Molded.php

Physical Properties	Metric	English	Comments
Density	1.43 g/cc	0.0517 lb/in ³	ISO 1183
Moisture Absorption	1.10 % @Temperature 23.0 °C	1.10 % @Temperature 73.4 °F	50% RH; ISO 62
Water Absorption at Saturation	4.5 % @Temperature 23.0 °C	4.5 % @Temperature 73.4 °F	ISO 62-1
Linear Mold Shrinkage, Flow	0.0020 - 0.0030 cm/cm	0.0020 - 0.0030 in/in	on Tensile Bar; ISO 294

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	108	108	ISO 2039-2
Tensile Strength at Break	175 MPa	25400 psi	5 mm/min; ISO 527
Elongation at Break	3.0 %	3.0 %	5 mm/min; ISO 527
Tensile Modulus	11.0 GPa	1600 ksi	1 mm/min; ISO 527
Flexural Strength	260 MPa	37700 psi	2 mm/min; ISO 178
Flexural Modulus	10.25 GPa	1487 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	8.00 kJ/m ² @Temperature -40.0 °C	3.81 ft-lb/in ² @Temperature -40.0 °F	80x10x4; ISO 180/1A
	9.00 kJ/m ² @Temperature -30.0 °C	4.28 ft-lb/in ² @Temperature -22.0 °F	80x10x4; ISO 180/1A
	10.0 kJ/m ² @Temperature -20.0 °C	4.76 ft-lb/in ² @Temperature -4.00 °F	80x10x4; ISO 180/1A
	12.0 kJ/m ² @Temperature 23.0 °C	5.71 ft-lb/in ² @Temperature 73.4 °F	80x10x4; ISO 180/1A
	7.00 J/cm ²	33.3 ft-lb/in ²	

Charpy Impact Unnotched Mechanical Properties	Metric @ Temperature 23.0 °C	English @ Temperature 73.4 °F	Edgew 80x10x4; ISO 179/1eU Comments
	7.00 J/cm ²	33.3 ft-lb/in ²	Edgew 80x10x4; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	0.900 J/cm ²	4.28 ft-lb/in ²	Edgew 80x10x4; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	1.10 J/cm ²	5.23 ft-lb/in ²	Edgew 80x10x4; ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	21.0 µm/m-°C	11.7 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 60.0 °C	@Temperature 73.4 - 140 °F	
CTE, linear, Transverse to Flow	15.0 µm/m-°C	8.33 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 60.0 °C	@Temperature 73.4 - 140 °F	
Deflection Temperature at 0.46 MPa (66 psi)	255 °C	491 °F	Edgew 120x10x4, sp=100 mm; ISO 75/Bf
Deflection Temperature at 1.8 MPa (264 psi)	248 °C	478 °F	Edgew 120x10x4, sp=100 mm; ISO 75/Af
Vicat Softening Point	245 °C	473 °F	B/120; ISO 306
	245 °C	473 °F	B/50; ISO 306
UL RTI, Electrical	100 °C	212 °F	
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	100 °C	212 °F	
	@Thickness 3.00 mm	@Thickness 0.118 in	
UL RTI, Mechanical with Impact	95.0 °C	203 °F	
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	100 °C	212 °F	
	@Thickness 3.00 mm	@Thickness 0.118 in	
UL RTI, Mechanical without Impact	100 °C	212 °F	
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	105 °C	221 °F	
	@Thickness 3.00 mm	@Thickness 0.118 in	

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

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	3.2	3.2	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	4.5	4.5	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
Dielectric Strength	16.0 kV/mm	406 kV/in	in oil; IEC 60243-1
	@Thickness 3.20 mm	@Thickness 0.126 in	
Dissipation Factor	0.0061	0.0061	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
	0.0142	0.0142	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	600 V	600 V	IEC 60112

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 Processing Properties	75.0 - 85.0 °C Metric	167 - 185 °F English	Comments
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