

Eurostar Starflam AFR682B1 PA66, Mineral Reinforced, Flame Retardant, Injection Molding

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, 10% Mineral Filled

Material Notes:

Starflam AFR682B1 is a Flame Retardant, Mineral Filled Polyamide 66, Injection Molding Resin. Information provided by Eurostar.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Eurostar-Starflam-AFR682B1-PA66-Mineral-Reinforced-Flame-Retardant-Injection-Molding.php

Physical Properties	Metric	English	Comments
Density	1.56 g/cc	0.0564 lb/in ³	ISO 1183
Moisture Absorption	0.600 % @Temperature 23.0 °C	0.600 % @Temperature 73.4 °F	50% RH; ISO 62
Water Absorption at Saturation	5.0 % @Temperature 23.0 °C	5.0 % @Temperature 73.4 °F	ISO 62-1
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	on Tensile Bar; E2P method

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	118	118	ISO 2039-2
Hardness, H358/30	145 MPa	21000 psi	ISO 2039-1
Tensile Strength at Break	70.0 MPa	10200 psi	5 mm/min; ISO 527
Elongation at Break	2.0 %	2.0 %	5 mm/min; ISO 527
Tensile Modulus	8.00 GPa	1160 ksi	1 mm/min; ISO 527
Flexural Strength	110 MPa	16000 psi	2 mm/min; ISO 178
Flexural Modulus	7.50 GPa	1090 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	3.00 kJ/m ² @Temperature 23.0 °C	1.43 ft-lb/in ² @Temperature 73.4 °F	80x10x4; ISO 180/1A
	3.00 kJ/m ² @Temperature -20.0 °C	1.43 ft-lb/in ² @Temperature -4.00 °F	80x10x4; ISO 180/1A
	3.00 kJ/m ² @Temperature -30.0 °C	1.43 ft-lb/in ² @Temperature -22.0 °F	80x10x4; ISO 180/1A
	3.00 kJ/m ² @Temperature -40.0 °C	1.43 ft-lb/in ² @Temperature -40.0 °F	80x10x4; ISO 180/1A

Mechanical Properties	Metric	English	Comments
Izod Impact, Unnotched (ISO)	@Temperature 23.0 °C	@Temperature 73.4 °F	80x10x4; ISO 180/1U
	22.0 kJ/m ²	10.5 ft-lb/in ²	80x10x4; ISO 180/1U
Charpy Impact Unnotched	@Temperature -30.0 °C	@Temperature -22.0 °F	Edgew 80x10x4 sp=62; ISO 179/1eU
	2.50 J/cm ²	11.9 ft-lb/in ²	Edgew 80x10x4 sp=62; ISO 179/1eU
Charpy Impact, Notched	@Temperature 23.0 °C	@Temperature 73.4 °F	Edgew 80x10x4 sp=62; ISO 179/1eA
	0.300 J/cm ²	1.43 ft-lb/in ²	Edgew 80x10x4 sp=62; ISO 179/1eA
Taber Abrasion, mg/1000 Cycles	@Temperature -30.0 °C	@Temperature -22.0 °F	CS-17; E2P Method
	49	49	
	@Load 1.00 kg	@Load 2.20 lb	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	35.0 µm/m-°C	19.4 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 60.0 °C	@Temperature 73.4 - 140 °F	
CTE, linear, Transverse to Flow	45.0 µm/m-°C	25.0 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 60.0 °C	@Temperature 73.4 - 140 °F	
Thermal Conductivity	0.350 W/m-K	2.43 BTU-in/hr-ft ² -°F	ISO 8302
Hot Ball Pressure Test	123 - 127 °C	253 - 261 °F	IEC 60695-10-2
Deflection Temperature at 0.46 MPa (66 psi)	238 °C	460 °F	Edgew 120x10x4, sp=100 mm; ISO 75/Be
Deflection Temperature at 1.8 MPa (264 psi)	170 °C	338 °F	Edgew 120x10x4, sp=100 mm; ISO 75/Ae
Vicat Softening Point	235 °C	455 °F	B/120; ISO 306
	237 °C	459 °F	B/50; ISO 306
Flammability, UL94	2.00	2.00	
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	V-1	V-1	

Thermal Properties	Metric	English	Comments
	@Thickness 3.00 mm	@Thickness 0.118 in	
Oxygen Index	32 %	32 %	ISO 4589
Glow Wire Test	960 °C	1760 °F	IEC 60695-2-12
	@Thickness 1.00 mm	@Thickness 0.0394 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+16 ohm	>= 1.00e+16 ohm	IEC 60093
Dielectric Constant	3.2	3.2	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	3.4	3.4	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
Dielectric Strength	24.0 kV/mm	610 kV/in	in oil; IEC 60243-1
	@Thickness 3.20 mm	@Thickness 0.126 in	
Dissipation Factor	0.0104	0.0104	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
Comparative Tracking Index	0.0122	0.0122	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	600 V	600 V	IEC 60112
	600 V	600 V	M; IEC 60112

Processing Properties	Metric	English	Comments
Zone 1	260 - 270 °C	500 - 518 °F	
Zone 2	270 - 280 °C	518 - 536 °F	
Zone 3	270 - 285 °C	518 - 545 °F	
Melt Temperature	270 - 285 °C	518 - 545 °F	
Mold Temperature	60.0 - 90.0 °C	140 - 194 °F	
Drying Temperature	75.0 - 85.0 °C	167 - 185 °F	
	@Time 14400 - 21600		

Processing Properties	^{sec} Metric	@Time 4.00 - 6.00 hour English	Comments
Moisture Content	0.20 %	0.20 %	

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