

Starflam® RF0077P

polyamide 66



Starflam RF0077P is a glass fiber reinforced, flame retardant PA66+PA6 for injection molded applications. The material is halogen free and red phosphorus free.

General

Regional Availability	• North America	• Europe	
Additive	• Flame Retarding Agent	• Heat Stabilizer	• Release agent
Features	• Flame Retardant	• Halogen Content, None	
Agency Rating	• ISO, 1043 PA66+PA6 GF35 FR(40)		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.49	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	0.8	*	%	
Flow : 23°C, 2.00 mm	0.2	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.9	*	%	
Equilibrium, 23°C, 50% RH	0.8	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	13800	10300	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	139	112	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	1.7	2.2	%	ISO 527-2
Flexural Modulus (23°C)	11600	9400	MPa	ISO 178
Flexural Strength (23°C)	215	177	MPa	ISO 178

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	8.3	9.5	kJ/m ²	
-30°C	8.6	8	kJ/m ²	
-40°C	8	7.8	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	53	61	kJ/m ²	
-30°C	52	50	kJ/m ²	
-40°C	48	46	kJ/m ²	

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Notched Izod Impact Strength				ISO 180/1A
+23°C	7.2	8.9	kJ/m²	
-30°C	7.1	7.9	kJ/m²	
-40°C	7.8	7.7	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	229	223	°C	
0.45 MPa, Unannealed	252	248	°C	
Melting Temperature	257	*	°C	ISO 11357-3
RTI Elec				UL 746
0.800 mm	140		°C	
1.50 mm	140		°C	
3.00 mm	140		°C	
RTI Imp				UL 746
0.800 mm	110		°C	
1.50mm	110		°C	
3.00 mm	110		°C	
RTI Str				UL 746
0.800 mm	140		°C	
1.50 mm	140		°C	
3.00 mm	140		°C	

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	30	28	kV/mm	IEC 60243
Comparative Tracking Index (3.00 mm)	600		V	IEC 60112
High Amp Arc Ignition (HAI)				UL 746
0.800 mm	PLC 0		-	
1.50 mm	PLC 0		-	
3.00 mm	PLC 0		-	
Hot-wire Ignition (HWI)				UL 746
0.800 mm	PLC 0		-	
1.50 mm	PLC 0		-	
3.00 mm	PLC 0		-	

Flammability	Value	Unit	Test Standard
Flammability			UL 94
0.800 mm	V-0	-	
1.50 mm	V-0	-	
3.00 mm	V-0	-	

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Glow Wire Flammability Index			IEC 60695-2-12
0.800 mm	960	°C	
1.50 mm	960	°C	
3.00 mm	960	°C	

Glow Wire Ignition Temperature			IEC 60695-2-13
0.800 mm	775	°C	
1.50 mm	775	°C	
3.00 mm	825	°C	

Injection	Value	Unit
Drying Temperature	80	°C
Drying Time	4	h
Suggested Max Moisture	0.2	%
Rear Temperature	265 - 275	°C
Middle Temperature	265 - 275	°C
Front Temperature	265 - 280	°C
Processing (Melt) Temperature	270 - 280	°C
Mold Temperature	60 - 100	°C

