

Starflam® RF0057P

copolyamide 66/6



Starflam RF0057P is a 25% glass fiber reinforced, flame retardant PA66/6 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 GF25 FR(40)		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.41	-	g/cm ³	ISO 1183
Water Absorption				ISO 62
23°C, 24 hr	1	*	%	
Equilibrium, 23°C, 50% RH	1.2	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	9900	7800	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	131	94	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.8	2.7	%	ISO 527-2
Flexural Modulus (23°C)	9700	6300	MPa	ISO 178
Flexural Strength (23°C)	205	134	MPa	ISO 178

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	9.8	12	kJ/m ²	
-30°C	9.3	9.2	kJ/m ²	
-40°C	9.2	7.9	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	64	65	kJ/m ²	
-30°C	59	58	kJ/m ²	
-40°C	57	58	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	9.3	10	kJ/m ²	
-30°C	9.4	8.4	kJ/m ²	

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-40°C	9.1	7.5	kJ/m ²	
Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	220	214	°C	
0.45 MPa, Unannealed	246	242	°C	
Melting Temperature	253	*	°C	ISO 11357-3
RTI Elec				UL 746
0.800 mm	140		°C	
1.60 mm	140		°C	
3.00 mm	140		°C	
RTI Imp				UL 746
0.800 mm	105		°C	
1.60 mm	105		°C	
3.00 mm	105		°C	
RTI Str				UL 746
0.800 mm	140		°C	
1.60 mm	140		°C	
3.00 mm	140		°C	
Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	27	31	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		-	
1.60 mm	PLC 0		-	
3.00 mm	PLC 0		-	
Hot-wire Ignition (HWI)				UL 746
0.800 mm	PLC 0		-	
1.60 mm	PLC 0		-	
3.00 mm	PLC 0		-	
Flammability	Value		Unit	Test Standard
Flammability				UL 94
0.800 mm	V-0		-	
1.60 mm	V-0		-	
3.00 mm	V-0		-	
Glow Wire Flammability Index				IEC 60695-2-12
0.800 mm	960		°C	

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1.60 mm	960	°C	
3.00 mm	960	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.800 mm	775	°C	
1.60 mm	800	°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	270 - 280	°C
Processing (Melt) Temperature	270 - 280	°C
Mold Temperature	60 - 100	°C

