

Starflam® FR350J BK0802

polyamide 66



Starflam FR350J BK0802 is an unreinforced, halogenated flame-retardant PA66 compound designed with excellent glow wire ignition temperature (GWIT). It exhibits excellent strength and ductility, allowing increased flexibility in product design needed for living hinges and snap fits. FR350J BK0802 provides enhanced flow and is lubricated for machine feed and easy mold release.

General

Regional Availability	• North America • South and Central America	• Europe • Near East/Africa	• Asia Pacific
Additive	• Flame Retarding Agent • Release agent	• Heat Stabilizer	• Lubricant
Features	• Chemical Resistant • Good Electrical Properties • Heat Aging Resistant • Lubricated	• Corrosion Resistant • Good Mold Release • Laser Markable • Organic Heat Stabilized	• Flame Retardant • Halogenated • Laser Weldable • Thermal Stability
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.32	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.7	*	%	
Flow : 23°C, 2.00 mm	1.6	*	%	
Water Absorption				ISO 62
23°C, 24 hr	1.3	*	%	
Equilibrium, 23°C, 50% RH	1.7	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	3100	1800	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	69	48	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	64	42	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	3.9	21	%	ISO 527-2
Tensile Strain (Break, 23°C)	23	>50	%	ISO 527-2
Flexural Modulus (23°C)	3400	1700	MPa	ISO 178
Flexural Strength (23°C)	93	41	MPa	ISO 178
Poisson's Ratio (23°C)	0.38	-		ISO 527-2

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Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	5	7	kJ/m²	
-30°C	4.3	3.5	kJ/m²	
-40°C	4.3	3.2	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	117	N	kJ/m²	
-30°C	113	119	kJ/m²	
-40°C	111	112	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	4.8	6.3	kJ/m²	
-30°C	5.3	5.2	kJ/m²	
-40°C	5.4	5.3	kJ/m²	
Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	80	-	°C	
0.45 MPa, Unannealed	230	-	°C	
Melting Temperature	260	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	60	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	62	*	E-6/K	
RTI Elec				UL 746
0.400 mm	130		°C	
0.750 mm	130		°C	
1.50 mm	130		°C	
3.00 mm	130		°C	
RTI Imp				UL 746
0.400 mm	65		°C	
0.750 mm	65		°C	
1.50mm	65		°C	
3.00 mm	65		°C	
RTI Str				UL 746
0.400 mm	110		°C	
0.750 mm	110		°C	
1.50 mm	110		°C	
3.00 mm	110		°C	

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Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	29	26	kV/mm	IEC 60243
High Amp Arc Ignition (HAI)				UL 746
0.400 mm	PLC 0		-	
0.750 mm	PLC 0		-	
1.50 mm	PLC 0		-	
3.00 mm	PLC 0		-	
Hot-wire Ignition (HWI)				UL 746
0.400 mm	PLC 0		-	
0.750 mm	PLC 0		-	
1.50 mm	PLC 0		-	
3.00 mm	PLC 0		-	
Flammability	Value		Unit	Test Standard
Flammability				UL 94
0.400 mm	V-0		-	
0.750 mm	V-0		-	
1.50 mm	V-0		-	
3.00 mm	V-0		-	
Flammability, 5V				UL 94
1.50 mm	5VA		-	
3.00 mm	5VA		-	
Glow Wire Flammability Index				IEC 60695-2-12
0.200 mm	960		°C	
0.400 mm	960		°C	
0.750 mm	960		°C	
1.50 mm	960		°C	
3.00 mm	960		°C	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.200 mm	960		°C	
0.400 mm	960		°C	
0.750 mm	960		°C	
1.50 mm	960		°C	
3.00 mm	960		°C	
Injection	Value		Unit	
Drying Temperature	80		°C	
Drying Time	4		h	
Rear Temperature	260 - 290		°C	

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Middle Temperature	260 - 290	°C
Front Temperature	260 - 290	°C
Nozzle temperature	260 - 290	°C
Processing (Melt) Temperature	270 - 285	°C
Mold Temperature	65 - 95	°C

