

Starflam® FR350J NT0727

polyamide 66



Starflam FR350J NT0727 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 NT0727 provides enhanced flow and is lubricated for machine feed and easy mold release.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Flame Retarding Agent	• Heat Stabilizer	• Lubricant
Features	• Chemical Resistant • Good Electrical Properties • Heat Aging Resistant • Lubricated	• Corrosion Resistant • Good Mold Release • Homopolymer • Organic Heat Stabilized	• Flame Retardant • Halogenated • Ignition Resistant • Thermal Stability
Agency Rating	• RoHS Compliant		
UL File Number	• E70062		
Appearance	• Natural Color		
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	1.4	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.9	*	%	
Equilibrium, 23°C, 50% RH	1.8	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	3400	1700	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	75	-	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	69	47	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	4	-	%	ISO 527-2
Tensile Strain (Break, 23°C)	22	64	%	ISO 527-2
Flexural Modulus (23°C)	3600	1500	MPa	ISO 178
Flexural Strength (23°C)	98	37	MPa	ISO 178
Poisson's Ratio (23°C)	0.38		-	ISO 527-2

Starflam® FR350J NT0727

polyamide 66



Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	3.4	6.1	kJ/m²	
-30°C	3.2	3.3	kJ/m²	
-40°C	3.5	3.3	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	3.8	5.8	kJ/m²	
-30°C	4.4	4.5	kJ/m²	
-40°C	4.2	4.6	kJ/m²	
Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	79	-	°C	
0.45 MPa, Unannealed	218	209	°C	
Melting Temperature	265	*	°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	
Electrical	dry	cond.	Unit	Test Standard
Volume Resistivity (1.00 mm)	2.8E13	3.5E9	Ohm*m	IEC 60093
High Amp Arc Ignition (HAI)				UL 746
0.400 mm	PLC 0		-	
0.750 mm	PLC 0		-	

Starflam® FR350J NT0727

polyamide 66



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
0.200 mm	V-0	-	
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
0.400 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
0.400 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
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