Starflam® FR350J NT0727

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

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			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Flame Retardant	• Heat Stabilizer	• Lubricant
Features	• Chemical Resistant • Corrosion Resistant • Flame Retardant • Good Electrical Properties • Good Mold Release	• Good Thermal Stability • Halogenated • Heat Aging Resistant • Heat Stabilized • Heat Stabilized - Organic	• Homopolymer • Ignition Resistant • Lubricated
RoHS Compliance	• RoHS Compliant		
UL File Number	• E70062		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66 FR		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.32	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.7	--	%	
Flow : 73°F, 0.0787 in	1.4	--	%	
Water Absorption (24 hr, 73°F)	0.90	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.8	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	493000	247000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	10900	--	psi	ISO 527-2
Tensile Stress (Break, 73°F)	10000	6820	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	4.0	--	%	ISO 527-2
Tensile Strain (Break, 73°F)	22	64	%	ISO 527-2
Flexural Modulus (73°F)	522000	218000	psi	ISO 178
Flexural Stress (73°F)	14200	5370	psi	ISO 178
Poisson's Ratio (73°F)	0.38	--		ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	1.7	1.6	ft·lb/in²	
-22°F	1.5	1.6	ft·lb/in²	
73°F	1.6	2.9	ft·lb/in²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	2.0	2.2	ft·lb/in²	
-22°F	2.1	2.1	ft·lb/in²	
73°F	1.8	2.8	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	424	408	°F	ISO 75-2/B

Deflection Temperature Under Load (264 psi, Unannealed)	174	--	°F	ISO 75-2/A
Melting Temperature	509	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	3.3E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	3.4E-5	--	in/in/°F	ISO 11359-2
RTI Elec				UL 746B
0.016 in	266	--	°F	
0.030 in	266	--	°F	
0.06 in	266	--	°F	
0.12 in	266	--	°F	
RTI Imp				UL 746B
0.016 in	149	--	°F	
0.030 in	149	--	°F	
0.06 in	149	--	°F	
0.12 in	149	--	°F	
RTI Str				UL 746B
0.016 in	230	--	°F	
0.030 in	230	--	°F	
0.06 in	230	--	°F	
0.12 in	230	--	°F	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Volume Resistivity (0.0394 in)	2.8E+15	3.5E+11	ohms·cm	IEC 60093
High Amp Arc Ignition (HAI)				UL 746A
0.016 in	PLC 0	--		
0.030 in	PLC 0	--		
0.06 in	PLC 0	--		
0.12 in	PLC 0	--		
Hot-wire Ignition (HWI)				UL 746A
0.016 in	PLC 0	--		
0.030 in	PLC 0	--		
0.06 in	PLC 0	--		
0.12 in	PLC 0	--		
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.0079 in	V-0	--		
0.016 in	V-0	--		
0.030 in	V-0	--		
0.06 in	• V-0 • 5VA	--		
0.12 in	• V-0 • 5VA	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.016 in	1760	--	°F	
0.030 in	1760	--	°F	
0.06 in	1760	--	°F	
0.12 in	1760	--	°F	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.016 in	1760	--	°F	
0.030 in	1760	--	°F	
0.06 in	1760	--	°F	
0.12 in	1760	--	°F	

Processing Information

Injection	**Dry**	**Unit**
Drying Temperature	176	°F
Drying Time	4.0	hr
Rear Temperature	500 to 554	°F
Middle Temperature	500 to 554	°F
Front Temperature	500 to 554	°F
erature	500 to 554	°F
Melt) Temp	518 to 545	°F
ature	149 to 203	°F