

Starflam® RF0077P

Ascend Performance Materials Operations LLC - Polyamide 66 + PA 6

General Information

Product Description

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

Material Status	• Commercial: Active
Availability	• Europe • North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Additive	• Flame Retardant • Heat Stabilizer • Mold Release
Features	• Flame Retardant • Halogen Free • Heat Stabilized
Agency Ratings	• ISO 1043 PA66+PA6 GF35 FR(40)
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• (PA66+PA6)-GF35 FR

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.49	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.80	--	%	
Flow : 73°F, 0.0787 in	0.20	--	%	
Water Absorption (24 hr, 73°F)	0.90	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.80	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	2.00E+6	1.49E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	20200	16200	psi	ISO 527-2
Tensile Strain (Break, 73°F)	1.7	2.2	%	ISO 527-2
Flexural Modulus (73°F)	1.68E+6	1.36E+6	psi	ISO 178
Flexural Stress (73°F)	31200	25700	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	3.8	3.7	ft·lb/in ²	
-22°F	4.1	3.8	ft·lb/in ²	
73°F	3.9	4.5	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	23	22	ft·lb/in ²	
-22°F	25	24	ft·lb/in ²	
73°F	25	29	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	3.7	3.7	ft·lb/in ²	
-22°F	3.4	3.8	ft·lb/in ²	
73°F	3.4	4.2	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	486	478	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	444	433	°F	ISO 75-2/A
Melting Temperature	495	--	°F	ISO 11357-3
RTI Elec				UL 746B



0.031 in	284	--	°F	
0.06 in	284	--	°F	
0.12 in	284	--	°F	
RTI Imp				UL 746B
0.031 in	230	--	°F	
0.06 in	230	--	°F	
0.12 in	230	--	°F	
RTI Str				UL 746B
0.031 in	284	--	°F	
0.06 in	284	--	°F	
0.12 in	284	--	°F	
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	760	710	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	600	--	V	IEC 60112
High Amp Arc Ignition (HAI)				UL 746A
0.03 in	PLC 0	--		
0.06 in	PLC 0	--		
0.12 in	PLC 0	--		
Hot-wire Ignition (HWI)				UL 746A
0.03 in	PLC 0	--		
0.06 in	PLC 0	--		
0.12 in	PLC 0	--		
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.031 in	V-0	--		
0.06 in	V-0	--		
0.12 in	V-0	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.031 in	1760	--	°F	
0.06 in	1760	--	°F	
0.12 in	1760	--	°F	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.031 in	1430	--	°F	
0.06 in	1430	--	°F	
0.12 in	1520	--	°F	

Processing Information

Injection	Dry Unit
Drying Temperature	176 °F
Drying Time	4.0 hr
Suggested Max Moisture	0.20 %
Rear Temperature	509 to 527 °F
Middle Temperature	509 to 527 °F
Front Temperature	509 to 536 °F
Processing (Melt) Temp	518 to 536 °F
Mold Temperature	140 to 212 °F

