

Starflam® 525H BK0771

Ascend Performance Materials Operations LLC - Polyamide 66

General Information
Product Description

Starflam 525H BK0771 is a heat stabilized, non-red phosphorus and non-halogenated flame retardant, PA66 grade modified with 25% glass fiber for improved stiffness and strength.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Additive	• Flame Retardant
Features	• Corrosion Resistant • Good Dimensional Stability • High Flow • Fast Molding Cycle • Good Processability • High Strength • Flame Retardant • Heat Aging Resistant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA66-GF25 FR

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.40	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.90	--	%	
Flow : 73°F, 0.0787 in	0.60	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.36E+6	1.02E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	17800	13200	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.5	3.0	%	ISO 527-2
Flexural Modulus (73°F)	1.31E+6	870000	psi	ISO 178
Flexural Stress (73°F)	28600	18700	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	3.5	3.6	ft·lb/in ²	
-22°F	3.6	3.8	ft·lb/in ²	
73°F	4.1	4.8	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	25	25	ft·lb/in ²	
-22°F	26	25	ft·lb/in ²	
73°F	28	29	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	3.5	3.8	ft·lb/in ²	
-22°F	3.5	3.6	ft·lb/in ²	
73°F	3.8	4.5	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	491	487	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	459	439	°F	ISO 75-2/A
Melting Temperature	500	--	°F	ISO 11357-3
RTI Elec				UL 746B
0.0079 in	284	--	°F	
0.016 in	302	--	°F	



0.030 in	302	--	°F	
0.06 in	302	--	°F	
0.12 in	302	--	°F	
RTI Imp				UL 746B
0.0079 in	230	--	°F	
0.016 in	239	--	°F	
0.030 in	266	--	°F	
0.06 in	284	--	°F	
0.12 in	284	--	°F	
RTI Str				UL 746B
0.0079 in	248	--	°F	
0.016 in	257	--	°F	
0.030 in	284	--	°F	
0.06 in	302	--	°F	
0.12 in	302	--	°F	
Electrical				
	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	790	480	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	575	--	V	IEC 60112
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 1	--		
0.030 in	PLC 1	--		
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 (0.016 in)	1380	--	°F	IEC 60695-2-13

Processing Information

Injection			Dry Unit
Drying Temperature			176 °F
Drying Time			4.0 to 6.0 hr
Rear Temperature			527 to 572 °F
Middle Temperature			527 to 572 °F
Front Temperature			527 to 572 °F
Processing (Melt) Temp			527 to 572 °F
Mold Temperature			140 to 248 °F

