

**Starflam® 525K NT0779**

Ascend Performance Materials Operations LLC - Polyamide 66

**General Information**
**Product Description**

Starflam 525K NT0779 is an organic heat stabilized, non-halogenated, non-red phosphorus 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	• Low Density
Automotive Specifications	• GM GMW18122P-PA-GF25-Type B1	• TESLA TM-1006 V3 303120V	
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66-GF25 FR		

**Properties <sup>1</sup>**

Physical	Dry	Conditioned	Unit	Test Method
Density	1.40	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.1	--	%	
Flow : 73°F, 0.0787 in	0.30	--	%	
Water Absorption (24 hr, 73°F)	1.0	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.9	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.26E+6	1.03E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	19100	14100	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.1	3.2	%	ISO 527-2
Flexural Modulus (73°F)	1.32E+6	899000	psi	ISO 178
Flexural Stress (73°F)	30200	19000	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	4.5	4.3	ft·lb/in <sup>2</sup>	
-22°F	4.5	4.3	ft·lb/in <sup>2</sup>	
73°F	4.8	6.7	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	30	29	ft·lb/in <sup>2</sup>	
-22°F	31	30	ft·lb/in <sup>2</sup>	
73°F	32	35	ft·lb/in <sup>2</sup>	
Notched Izod Impact Strength				ISO 180/1A
-40°F	4.3	4.4	ft·lb/in <sup>2</sup>	
-22°F	4.3	4.4	ft·lb/in <sup>2</sup>	
73°F	4.6	5.7	ft·lb/in <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	495	489	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	462	444	°F	ISO 75-2/A



Melting Temperature	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	1.3E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	3.7E-5	--	in/in/°F	ISO 11359-2
RTI Elec				UL 746B
0.0079 in	284	--	°F	
0.016 in	284	--	°F	
0.030 in	284	--	°F	
0.06 in	284	--	°F	
0.12 in	284	--	°F	
RTI Imp				UL 746B
0.0079 in	203	--	°F	
0.016 in	230	--	°F	
0.030 in	248	--	°F	
0.06 in	266	--	°F	
0.12 in	266	--	°F	
RTI Str				UL 746B
0.0079 in	239	--	°F	
0.016 in	266	--	°F	
0.030 in	284	--	°F	
0.06 in	302	--	°F	
0.12 in	302	--	°F	
<b>Electrical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Electric Strength (0.0394 in)	1100	--	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	600	--	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 2	--		
0.030 in	PLC 1	--		
0.06 in	PLC 0	--		
0.12 in	PLC 0	--		
<b>Flammability</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating				UL 94
0.0079 in	V-0	--		
0.016 in	V-0	--		
0.030 in	V-0	--		
0.06 in	<ul style="list-style-type: none"> <li>• V-0</li> <li>• 5VA</li> </ul>	--		
0.12 in	<ul style="list-style-type: none"> <li>• V-0</li> <li>• 5VA</li> </ul>	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.0079 in	1760	--	°F	
0.016 in	1760	--	°F	
0.030 in	1760	--	°F	
0.06 in	1760	--	°F	
0.12 in	1760	--	°F	

### Processing Information

<b>Injection</b>	<b>Dry Unit</b>
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
Nozzle Temperature	527 to 572 °F
(Melt) Temperature	527 to 572 °F
Temperature	140 to 248 °F



(Melt) Temperature  
Temperature

