

**Starflam® 525J NT0899**

 Ascend Performance Materials Operations LLC - *Polyamide 66*
**General Information**
**Product Description**

Starflam 525J NT0899 is a 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	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Additive	• Flame Retardant • Heat Stabilizer
Features	• Corrosion Resistant • Good Flow • High Strength • Electrical Corrosion Resistant • Good Processability • High Tensile Strength • Flame Retardant • Halogen Free • Low Density • Good Dimensional Stability • Heat Stabilized • Good Electrical Properties • Heat Stabilized - Organic
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA66-GF25 FR(40)

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

Physical	Dry	Conditioned	Unit	Test Method
Density	1.37	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.0	--	%	
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)	1.38E+6	870000	psi	ISO 527-1
Tensile Stress (Break, 73°F)	20300	13100	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.0	5.5	%	ISO 527-2
Flexural Modulus (73°F)	1.38E+6	870000	psi	ISO 178
Flexural Stress (73°F)	31200	19600	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	4.6	4.5	ft·lb/in <sup>2</sup>	
-22°F	4.8	4.7	ft·lb/in <sup>2</sup>	
73°F	5.2	6.7	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	30	31	ft·lb/in <sup>2</sup>	
-22°F	34	32	ft·lb/in <sup>2</sup>	
73°F	35	35	ft·lb/in <sup>2</sup>	
Notched Izod Impact Strength				ISO 180/1A
-40°F	4.7	4.8	ft·lb/in <sup>2</sup>	
-22°F	4.8	4.8	ft·lb/in <sup>2</sup>	
73°F	5.2	6.7	ft·lb/in <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	493	498	°F	ISO 75-2/B



Deflection Temperature Under Load (264 psi, Unannealed)	468	464	°F	ISO 75-2/A
Melting Temperature	504	--	°F	ISO 11357-3
<b>Electrical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Electric Strength (0.0394 in)	810	--	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	> 600	--	V	IEC 60112
<b>Flammability</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating				UL 94
0.06 in	V-0	--		
0.12 in	V-0	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.030 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
Suggested Max Moisture	< 0.20 %
Suggested Max Regrind	50 %
Rear Temperature	527 to 572 °F
Middle Temperature	527 to 572 °F
Front Temperature	527 to 572 °F
Nozzle Temperature	527 to 572 °F
Processing (Melt) Temp	527 to 572 °F
Mold Temperature	140 to 248 °F

