Starflam® 525J BK0900

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

Starflam 525J BK0900 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 • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Additive	• Flame Retardant	• Heat Stabilizer	
Features	• Corrosion Resistant • Electrical Corrosion Resistant • Flame Retardant • Good Dimensional Stability	• Good Electrical Properties • Good Flow • Good Processability • Halogen Free	• Heat Stabilized • Heat Stabilized - Organic • High Strength • Low Density
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66-GF25 FR(40)		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.37	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.2	--	%	
Flow : 73°F, 0.0787 in	0.40	--	%	
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)	1.44E+6	943000	psi	ISO 527-1
Tensile Stress (Break, 73°F)	20000	13100	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.8	5.5	%	ISO 527-2
Flexural Modulus (73°F)	1.38E+6	943000	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	4.3	5.7	ft·lb/in²	
-22°F	3.8	3.7	ft·lb/in²	
73°F	4.3	5.7	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	27	26	ft·lb/in²	
-22°F	30	27	ft·lb/in²	
73°F	30	30	ft·lb/in²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	3.9	3.8	ft·lb/in²	
-22°F	3.9	3.9	ft·lb/in²	
73°F	4.5	6.2	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	495	493	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	471	455	°F	ISO 75-2/A

Melting Temperature	504	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	1.8E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	5.6E-5	--	in/in/°F	ISO 11359-2
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Electric Strength (0.0394 in)	710	--	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	> 600	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
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

Injection	**Dry**	**Unit**
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

Notes

[1] Typical properties: these are not to be construed as specifications.