

Starflam® RF0068E

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

Starflam RF0068E is a 30% glass fiber reinforced, flame retardant PA66 for injection molded applications. The material is halogen free and red phosphorus free.

General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> Europe North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 30% Filler by Weight
Additive	<ul style="list-style-type: none"> Flame Retardant Heat Stabilizer Mold Release
Features	<ul style="list-style-type: none"> Flame Retardant Halogen Free Heat Stabilized
Appearance	<ul style="list-style-type: none"> Natural Color
Forms	<ul style="list-style-type: none"> Pellets
Processing Method	<ul style="list-style-type: none"> Injection Molding
Resin ID	<ul style="list-style-type: none"> PA66-GF30 FR

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.43	--	g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F)	0.80	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.90	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.55E+6	1.29E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	19300	16000	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.2	2.5	%	ISO 527-2
Flexural Modulus (73°F)	1.51E+6	1.17E+6	psi	ISO 178
Flexural Stress (73°F)	28600	24500	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	4.3	4.4	ft·lb/in ²	
-22°F	4.3	4.3	ft·lb/in ²	
73°F	4.1	4.7	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	24	25	ft·lb/in ²	
-22°F	27	25	ft·lb/in ²	
73°F	29	28	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	4.0	4.3	ft·lb/in ²	
-22°F	3.9	4.2	ft·lb/in ²	
73°F	3.7	4.3	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	495	495	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	462	460	°F	ISO 75-2/A
Melting Temperature	498	--	°F	ISO 11357-3
RTI Elec				UL 746B
0.030 in	284	--	°F	
0.12 in	284	--	°F	
RTI Imp				UL 746B
0.030 in	230	--	°F	



0.12 in	230	--	°F	
RTI Str				UL 746B
0.030 in	284	--	°F	
0.12 in	284	--	°F	
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	660	660	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	600	--	V	IEC 60112
High Amp Arc Ignition (HAI)				UL 746A
0.030 in	PLC 0	--		
0.12 in	PLC 0	--		
Hot-wire Ignition (HWI)				UL 746A
0.030 in	PLC 2	--		
0.12 in	PLC 0	--		
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.016 in	V-0	--		
0.030 in	V-0	--		
0.12 in	V-0	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.016 in	1760	--	°F	
0.030 in	1760	--	°F	
0.12 in	1760	--	°F	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.016 in	1340	--	°F	
0.030 in	1340	--	°F	
0.12 in	1380	--	°F	
Oxygen Index ²	35	--	%	ISO 4589-2
Smoke Density ²	97	--	Ds	ISO 5659-2
Smoke Toxicity ²	0.47	--	CIT NLP	NF X 70-100-1/2
Additional Information	Dry	Conditioned	Unit	Test Method
Railway Classification ²				EN 45545-2
R22	HL3	--		
R23	HL3	--		

Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.25	%
Rear Temperature	509 to 527	°F
Middle Temperature	518 to 536	°F
Front Temperature	518 to 536	°F
Processing (Melt) Temp	518 to 536	°F
Mold Temperature	140 to 212	°F

Notes

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

² Railway Application

