Starflam® RF0055E

Ascend Performance Materials Operations LLC - *Polyamide 66/6 Copolymer*

General Information

Product Description

Starflam RF0055E is a 25% glass fiber reinforced, flame retardant (PA66+PA6)-blend for injection molded applications. The material is halogen free and red phosphorus free.

General			
Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Additive	• Flame Retardant	• Heat Stabilizer	• Mold Release
Features	• Flame Retardant • Halogen Free	• Heat Stabilized • Ignition Resistant	
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66/6-GF25 FR		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.44	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.70	--	%	
Flow : 73°F, 0.0787 in	0.20	--	%	
Water Absorption (24 hr, 73°F)	1.4	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.7	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.55E+6	1.00E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	20500	12600	psi	ISO 527-2
Tensile Strain (Break, 73°F)	1.8	2.3	%	ISO 527-2
Flexural Modulus (73°F)	1.52E+6	943000	psi	ISO 178
Flexural Stress (73°F)	29900	18400	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	3.9	3.4	ft·lb/in²	
-22°F	3.7	3.3	ft·lb/in²	
73°F	3.6	4.6	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	14	17	ft·lb/in²	
-22°F	14	16	ft·lb/in²	
73°F	16	25	ft·lb/in²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	3.8	3.4	ft·lb/in²	
-22°F	3.9	3.7	ft·lb/in²	
73°F	3.9	4.1	ft·lb/in²	
Unnotched Izod Impact Strength (73°F)	19	--	ft·lb/in²	ISO 180/1U
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	466	460	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	432	412	°F	ISO 75-2/A
Melting Temperature	491	--	°F	ISO 11357-3

Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	660	610	V/mil	IEC 60243-1
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.03 in	V-2	--		
0.07 in	V-0	--		
Glow Wire Ignition Temperature				IEC 60695-2-13
0.04 in	1560	--	°F	
0.06 in	1560	--	°F	
0.13 in	1560	--	°F	

Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	509 to 527	°F
Middle Temperature	509 to 527	°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.