Starflam® BFR552Y3

Ascend Performance Materials Operations LLC - *Polyamide 6*

General Information

Product Description

Starflam BFR552Y3 is a glass and mineral filled, flame retardant PA6 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\Mineral, 20% Filler by Weight	
Additive	• Flame Retardant	• Mold Release
Features	• Flame Retardant	• Good Dimensional Stability
Agency Ratings	• ISO 1043 PA6 (GF+MD)20 FR(30)	
Appearance	• Natural Color	
Forms	• Pellets	
Processing Method	• Injection Molding	
Resin ID	• PA6-(GF+MF)20 FR	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.34	g/cm³	ISO 1183
Water Absorption (Equilibrium, 73°F, 50% RH)	1.2	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	841000	psi	ISO 527-1
Tensile Stress (Break, 73°F)	12300	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.8	%	ISO 527-2
Flexural Modulus (73°F)	798000	psi	ISO 178
Flexural Stress (73°F)	21000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	0.95	ft·lb/in²	
73°F	1.4	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	12	ft·lb/in²	
73°F	14	ft·lb/in²	
Notched Izod Impact Strength			ISO 180/1A
-40°F	1.4	ft·lb/in²	
73°F	1.9	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
RTI Elec			UL 746B
0.030 in	149	°F	
0.12 in	149	°F	
RTI Imp			UL 746B
0.030 in	149	°F	
0.12 in	149	°F	
RTI Str			UL 746B
0.030 in	149	°F	
0.12 in	149	°F	
Electrical	**Nominal Value**	**Unit**	**Test Method**

High Amp Arc Ignition (HAI)		UL 746A
0.030 in	PLC 0	
0.12 in	PLC 0	
Hot-wire Ignition (HWI) (0.030 in)	PLC 3	UL 746A

Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.030 in	V-2		
0.12 in	V-2		

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	176	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	464 to 482	°F
Middle Temperature	482 to 500	°F
Front Temperature	482 to 518	°F
Processing (Melt) Temp	482 to 518	°F
Mold Temperature	122 to 194	°F

Notes

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