

Starflam® P10002E

polyamide 6



Starflam P10002E is an unfilled, flame retardant PA6 for injection molded applications. The material is halogen free and red phosphorus free.

General					
Material Status	• Commercial: Active				
Availability	• Europe				
Additive	• Flame Retardant		• Heat Stabilizer		
Features	• Bromine Free	• Flame Retardant	• Halogen Free		
Uses	• Electrical/Electronic Applications		• Industrial Applications		
Appearance	• Natural Color				
Forms	• Pellets				
Processing Method	• Injection Molding				
Physical	Dry	Conditioned	Unit	Test Method	
Density	1.17	--	g/cm ³	ISO 1183	
Mechanical	Dry	Conditioned	Unit	Test Method	
Tensile Modulus (23°C)	3500	--	MPa	ISO 527-2	
Tensile Stress (Break, 23°C)	75.0	--	MPa	ISO 527-2	
Tensile Strain (Break, 23°C)	5.0	--	%	ISO 527-2	
Flexural Modulus (23°C)	3100	--	MPa	ISO 178	
Flexural Strength (23°C)	105	--	MPa	ISO 178	
Impact	Dry	Conditioned	Unit	Test Method	
Notched Izod Impact Strength (23°C)	4.0	--	kJ/m ²	ISO 180/1A	
Unnotched Izod Impact Strength (23°C)	60	--	kJ/m ²	ISO 180	

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	200	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	80.0	--	°C	ISO 75-2/A
RTI Elec				
0.75 mm	120	--	°C	UL 746B
1.5 mm	120	--	°C	
3.0 mm	120	--	°C	
RTI Imp				
0.75 mm	65.0	--	°C	UL 746B
1.5 mm	75.0	--	°C	
3.0 mm	75.0	--	°C	
RTI Str				
0.75 mm	85.0	--	°C	UL 746B
1.5 mm	85.0	--	°C	
3.0 mm	85.0	--	°C	
Electrical	Dry	Conditioned	Unit	Test Method
High Amp Arc Ignition (HAI)				
0.75 mm	PLC 0	--		UL 746A
1.5 mm	PLC 0	--		
3.0 mm	PLC 0	--		
Hot-wire Ignition (HWI) (0.75 mm)	PLC 4	--		UL 746A
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				
0.40 mm	V-0	--		UL 94
0.75 mm	V-0	--		
1.5 mm	V-0	--		
3.0 mm	V-0	--		
Glow Wire Flammability Index (0.75 mm)	960	--	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (0.75 mm)	725	--	°C	IEC 60695-2-13

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Injection	Dry	Unit
Drying Temperature	75 to 85	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	230 to 240	°C
Middle Temperature	235 to 245	°C
Front Temperature	240 to 260	°C
Processing (Melt) Temp	240 to 260	°C
Mold Temperature	60 to 80	°C

Notes

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

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