

## Starflam® P10003

Ascend Performance Materials Operations LLC - Polyamide 6

### General Information

#### Product Description

Starflam P10003 is a mineral filled, flame retardant PA6 for injection molded applications. The material is halogen free and red phosphorus free.

#### General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Additive	• Flame Retardant • Heat Stabilizer • Mold Release
Features	• Flame Retardant • Good Electrical Properties • Heat Stabilized
Agency Ratings	• ISO 1043 PA6 FR(61)
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA6 FR

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.50	g/cm <sup>3</sup>	ISO 1183
Water Absorption (24 hr, 73°F)	0.90	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	972000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	10300	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.7	%	ISO 527-2
Flexural Modulus (73°F)	899000	psi	ISO 178
Flexural Stress (73°F)	17700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	1.9	ft·lb/in <sup>2</sup>	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	17	ft·lb/in <sup>2</sup>	ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	354	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	201	°F	ISO 75-2/A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	V-2		UL 94

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	167 to 185	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	473 to 491	°F
Middle Temperature	482 to 500	°F
Front Temperature	482 to 500	°F
Processing (Melt) Temp	491 to 509	°F
Mold Temperature	131 to 203	°F

