

**Vydyne® PF007**

Ascend Performance Materials Operations LLC - Polyamide 6

## General Information

**Product Description**

Vydyne PF007 is a 35% glass fiber reinforced PA6 for injection molded applications.

**General**

Material Status	• Commercial: Active
Availability	• Europe • North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Additive	• Heat Stabilizer • Mold Release
Features	• Heat Stabilized • High Rigidity • High Strength
Agency Ratings	• ISO 1043 PA6 GF35
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA6-GF35

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.42	g/cm <sup>3</sup>	ISO 1183
Water Absorption (Saturation, 73°F)	6.2	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.6	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	1.45E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	26100	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.2	%	ISO 527-2
Flexural Modulus (73°F)	1.41E+6	psi	ISO 178
Flexural Stress (73°F)	40600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.7	ft·lb/in <sup>2</sup>	
73°F	7.1	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	40	ft·lb/in <sup>2</sup>	
73°F	43	ft·lb/in <sup>2</sup>	
Notched Izod Impact Strength			ISO 180/1A
-40°F	4.8	ft·lb/in <sup>2</sup>	
-22°F	5.2	ft·lb/in <sup>2</sup>	
73°F	7.6	ft·lb/in <sup>2</sup>	
Thermal	Nominal Value	Unit	Test Method
CLTE - Flow (73 to 131°F, 0.0787 in)	1.2E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	4.5E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (0.0394 in)	1.0E+16	ohm·cm	IEC 60093
Comparative Tracking Index (0.118 in)	500	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Glow Wire Flammability Index (0.08 in)	1200	°F	IEC 60695-2-12
Oxygen Index	27	%	ISO 4589-2

## Processing Information

**Injection**

Nominal Value Unit



Drying Temperature	167 to 185 °F
Drying Time	4.0 hr
Suggested Max Moisture	0.20 %
Rear Temperature	446 to 464 °F
Middle Temperature	464 to 482 °F
Front Temperature	464 to 518 °F
Processing (Melt) Temp	464 to 518 °F
Mold Temperature	140 to 176 °F

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

