

**Vydyne® BG5H**

 Ascend Performance Materials Operations LLC - *Polyamide 6*
**General Information**
**Product Description**

Vydyne BG5H is a heat stabilized 25% glass fiber reinforced PA6 for injection molded applications.

**General**

Material Status	• Commercial: Active
Availability	• Europe • North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Additive	• Heat Stabilizer • Mold Release
Features	• Good Stiffness • Good Strength • Heat Stabilized
Agency Ratings	• ISO 1043 PA6 GF25
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA6-GF25

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density	1.31	g/cm <sup>3</sup>	ISO 1183
Water Absorption (Saturation, 73°F)	6.5	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	1.15E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	21800	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.5	%	ISO 527-2
Flexural Modulus (73°F)	1.13E+6	psi	ISO 178
Flexural Stress (73°F)	27600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength (73°F)	24	ft·lb/in <sup>2</sup>	ISO 179/1eU
Notched Izod Impact Strength			ISO 180/1A
-40°F	3.3	ft·lb/in <sup>2</sup>	
73°F	4.8	ft·lb/in <sup>2</sup>	
Thermal	Nominal Value	Unit	Test Method
CLTE - Flow (73 to 131°F, 0.0787 in)	1.7E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	5.1E-5	in/in/°F	ISO 11359-2
RTI Elec			UL 746B
0.030 in	149	°F	
0.06 in	149	°F	
0.12 in	149	°F	
RTI Imp			UL 746B
0.030 in	149	°F	
0.06 in	149	°F	
0.12 in	149	°F	
RTI Str			UL 746B
0.030 in	149	°F	
0.06 in	149	°F	
0.12 in	149	°F	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (0.0394 in)	1.0E+16	ohms·cm	IEC 60093
Comparative Tracking Index (0.118 in)	500	V	IEC 60112



<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating			UL 94
0.030 in		HB	
0.06 in		HB	
0.12 in		HB	
Glow Wire Flammability Index (0.08 in)	1200	°F	IEC 60695-2-12
Oxygen Index	24	%	ISO 4589-2

### Processing Information

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
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.

