

## Vydyne® B 35 GF NT

Ascend Performance Materials Operations LLC - Polyamide 6

### General Information

#### Product Description

Vydyne B 35 GF NT is standard flow, 35% glass-fiber reinforced PA6 resin. Available in natural, this product is also lubricated for improved machine feed and flow.

#### General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Additive	• Lubricant
Features	• Chemical Resistant • Gasoline Resistant • General Purpose • Good Flow • Good Heat Resistance • Lubricated
Appearance	• Black • Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA6-GF35

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

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow : 73°F, 0.0787 in	0.60	%	
Flow : 73°F, 0.0787 in	0.30	%	
Water Absorption (24 hr, 73°F)	1.0	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.0	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	1.60E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	28000	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.9	%	ISO 527-2
Flexural Modulus (73°F)	1.41E+6	psi	ISO 178
Flexural Stress (73°F)	42100	psi	ISO 178
Poisson's Ratio (73°F)	0.34		ISO 527-2
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-40°F	5.2	ft·lb/in <sup>2</sup>	
-22°F	6.2	ft·lb/in <sup>2</sup>	
73°F	8.6	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-40°F	36	ft·lb/in <sup>2</sup>	
-22°F	40	ft·lb/in <sup>2</sup>	
73°F	45	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	5.5	ft·lb/in <sup>2</sup>	
73°F	7.4	ft·lb/in <sup>2</sup>	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	419	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ISO 75-2/A
Melting Temperature	428	°F	ISO 11357-3



CLTE - Flow (73 to 131°F, 0.0787 in)	1.0E-5 in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	3.6E-5 in/in/°F	ISO 11359-2
<b>Electrical</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Electric Strength (0.0394 in)	640 V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	600 V	IEC 60112
<b>Flammability</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Burning Rate (0.0787 in)	4.0 in/min	ISO 3795
Glow Wire Flammability Index (0.08 in)	1200 °F	IEC 60695-2-12

### Processing Information

<b>Injection</b>	<b>Nominal Value Unit</b>
Drying Temperature	176 to 194 °F
Drying Time	> 3.0 hr
Processing (Melt) Temp	446 to 500 °F
Mold Temperature	176 to 194 °F

### Notes

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

