

Vydyne® B 15 GF NT

Ascend Performance Materials Operations LLC - *Polyamide 6*

General Information

Product Description

Vydyne B 15 GF NT is standard flow, 15% 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, 15% Filler by Weight
Additive	• Lubricant
Features	• Chemical Resistant • General Purpose • Lubricated • Gasoline Resistant • Good Flow
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA6-GF15

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.24	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow : 73°F, 0.0787 in	0.90	%	
Flow : 73°F, 0.0787 in	0.50	%	
Water Absorption (24 hr, 73°F)	1.3	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.5	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	870000	psi	ISO 527-1
Tensile Stress (Break, 73°F)	18900	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.5	%	ISO 527-2
Flexural Modulus (73°F)	725000	psi	ISO 178
Flexural Stress (73°F)	24700	psi	ISO 178
Poisson's Ratio (73°F)	0.35		ISO 527-2
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-40°F	2.4	ft·lb/in ²	
-22°F	2.9	ft·lb/in ²	
73°F	3.8	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-40°F	14	ft·lb/in ²	
-22°F	19	ft·lb/in ²	
73°F	24	ft·lb/in ²	
Notched Izod Impact Strength			ISO 180/1A
-40°F	1.9	ft·lb/in ²	
-22°F	2.4	ft·lb/in ²	
73°F	3.1	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	410	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	401	°F	ISO 75-2/A
Melting Temperature	428	°F	ISO 11357-3



CLTE - Flow (73 to 131°F, 0.0787 in)	1.9E-5 in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	5.0E-5 in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit Test Method
Electric Strength (0.0394 in)	560 V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	600 V	IEC 60112
Flammability	Nominal Value	Unit Test Method
Glow Wire Flammability Index (0.08 in)	1200 °F	IEC 60695-2-12

Processing Information

Injection	Nominal Value	Unit
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

¹ Typical properties: these are not to be construed as specifications.

