

Vydyne® B 50 GF NT

polyamide 6



Vydyne B 50 GF NT is standard flow, 50% glass-fiber reinforced PA6 resin. Available in natural, this product is also lubricated for improved machine feed and flow.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Lubricant		
Features	• Chemical Resistant • Good Flow	• Gasoline Resistant • Good Heat Resistance	• General Purpose • Lubricated
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.57	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	0.5	*	%	
Flow : 23°C, 2.00 mm	0.2	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.8	*	%	
Equilibrium, 23°C, 50% RH	1.6	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	16000	-	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	225	-	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.5	-	%	ISO 527-2
Flexural Modulus (23°C)	13000	-	MPa	ISO 178
Flexural Strength (23°C)	330	-	MPa	ISO 178
Poisson's Ratio (23°C)	0.34	-	-	ISO 527-2

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	20	-	kJ/m ²	
-30°C	16	-	kJ/m ²	
-40°C	15	-	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	105	-	kJ/m ²	
-30°C	95	-	kJ/m ²	
-40°C	80	-	kJ/m ²	

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Notched Izod Impact Strength				ISO 180/1A
+23°C	18	-	kJ/m²	
-30°C	14.5	-	kJ/m²	
-40°C	12	-	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	215	-	°C	
0.45 MPa, Unannealed	220	-	°C	
Melting Temperature	220	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	15	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	100	*	E-6/K	

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	25	-	kV/mm	IEC 60243
Comparative Tracking Index (3.00 mm)	575		V	IEC 60112

Flammability	Value	Unit	Test Standard
Burning Rate, 2.00 mm	102	mm/min	ISO 3795
Glow Wire Flammability Index			IEC 60695-2-12
2.00 mm	650	°C	

Injection	Value	Unit
Drying Temperature	80 - 90	°C
Drying Time	≥ 3	h
Processing (Melt) Temperature	230 - 260	°C
Mold Temperature	80 - 90	°C

