

Vydyne® BG10HU

polyamide 6



Vydyne BG10HU is an UV and heat stabilized 50% glass fiber reinforced PA6 for injection molded applications.

General

Regional Availability	• North America	• Europe
Additive	• Heat Stabilizer	• Release agent
Features	• High Rigidity	• High Strength
Agency Rating	• ISO, 1043 PA6 GF50	
Appearance	• Natural Color	
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	dry	cond.	Unit	Test Standard
Density	1.55	-	g/cm ³	ISO 1183
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	0.6	*	%	
Water Absorption, Saturation, 23°C	4.5		%	ISO 62

Mechanical	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	14000	-	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	224	-	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	3.2	-	%	ISO 527-2
Flexural Modulus (23°C)	13200	-	MPa	ISO 178
Flexural Strength (23°C)	320	-	MPa	ISO 178

Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	18	-	kJ/m ²	
-30°C	15	-	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	100	-	kJ/m ²	
-30°C	100	-	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	18	-	kJ/m ²	
-30°C	15	-	kJ/m ²	
-40°C	14	-	kJ/m ²	
Unnotched Izod Impact Strength				ISO 180/1U
+23°C	90	-	kJ/m ²	
-30°C	90	-	kJ/m ²	

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Thermal	dry	cond.	Unit	Test Standard
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	12	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	83	*	E-6/K	
RTI Elec				UL 746
0.750 mm	65		°C	
1.50 mm	65		°C	
3.00 mm	65		°C	
RTI Imp				UL 746
0.750 mm	65		°C	
1.50mm	65		°C	
3.00 mm	65		°C	
RTI Str				UL 746
0.750 mm	65		°C	
1.50 mm	65		°C	
3.00 mm	65		°C	

Electrical	dry	cond.	Unit	Test Standard
Volume Resistivity (1.00 mm)	1E14	-	Ohm*m	IEC 60093
Comparative Tracking Index (3.00 mm)	500		V	IEC 60112

Flammability	dry	cond.	Unit	Test Standard
Flammability				UL 94
0.750 mm	HB		-	
1.50 mm	HB		-	
3.00 mm	HB		-	
Glow Wire Flammability Index				IEC 60695-2-12
2.00 mm	650		°C	
Oxygen index	25	*	%	EN ISO 4589-2

Injection	Value	Unit
Drying Temperature	80	°C
Drying Time	4	h
Suggested Max Moisture	0.2	%
Rear Temperature	230 - 240	°C
Middle Temperature	240 - 250	°C
Front Temperature	240 - 270	°C
Processing (Melt) Temperature	240 - 270	°C

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Mold Temperature

60 - 80

°C

