

Vydyne® B 30 GF H BK0947

Ascend Performance Materials Operations LLC - *Polyamide 6*

General Information

Product Description

Vydyne B 30 GF H BK0947 is a laser markable, heat stabilized, and 30% glass reinforced PA6. This product is also lubricated for improved machine feed and flow, suitable for injection molding applications.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	• Mold Release
Features	• Good Flow • Heat Aging Resistant	• Heat Stabilized • Laser Markable	• Lubricated
Automotive Specifications	• STELLANTIS MS-DB-41 CPN3840		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA6-GF30		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.37	--	g/cm ³	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)	2.0	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.1	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.41E+6	899000	psi	ISO 527-1
Tensile Stress (Break, 73°F)	25100	15800	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.4	8.5	%	ISO 527-2
Flexural Modulus (73°F)	1.33E+6	783000	psi	ISO 178
Flexural Stress (73°F)	36000	19000	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	4.4	4.7	ft·lb/in ²	
-22°F	4.5	5.2	ft·lb/in ²	
73°F	5.2	10	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	33	34	ft·lb/in ²	
-22°F	33	35	ft·lb/in ²	
73°F	38	49	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	4.4	5.2	ft·lb/in ²	
-22°F	4.5	5.7	ft·lb/in ²	
73°F	5.2	9.5	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	424	424	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	397	385	°F	ISO 75-2/A
Melting Temperature	428	--	°F	ISO 11357-3



Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	690	360	V/mil	IEC 60243-1

Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F
Drying Time	4.0 to 12	hr
Suggested Max Regrind	25	%
Rear Temperature	446 to 491	°F
Middle Temperature	455 to 500	°F
Front Temperature	464 to 500	°F
Nozzle Temperature	464 to 500	°F
Processing (Melt) Temp	464 to 500	°F
Mold Temperature	158 to 203	°F

Notes

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

