Vydyne® B 30 GF IH BK0946

Ascend Performance Materials Operations LLC - *Polyamide 6*

General Information

Product Description

Vydyne B 30 GF IH BK0946 is a laser markable, heat stabilized, 30% glass reinforced, and impact modified 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 • Good Impact Resistance	• Heat Aging Resistant • Heat Stabilized	• Laser Markable • Lubricated
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA6-I-GF30		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.34	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.70	--	%	
Flow : 73°F, 0.0787 in	0.40	--	%	
Water Absorption (24 hr, 73°F)	1.8	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.9	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.49E+6	885000	psi	ISO 527-1
Tensile Stress (Break, 73°F)	22800	15100	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.3	8.8	%	ISO 527-2
Flexural Modulus (73°F)	1.28E+6	725000	psi	ISO 178
Flexural Stress (73°F)	34400	17100	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	5.2	5.7	ft·lb/in²	
-22°F	6.2	6.2	ft·lb/in²	
73°F	8.1	13	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	42	42	ft·lb/in²	
-22°F	42	42	ft·lb/in²	
73°F	45	49	ft·lb/in²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	5.7	7.6	ft·lb/in²	
-22°F	7.1	8.6	ft·lb/in²	
73°F	8.6	13	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	424	423	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	394	387	°F	ISO 75-2/A
Melting Temperature	428	--	°F	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**

Electric Strength (0.0394 in)	710	460	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.