Vydyne® B 60 GF BK EST KW2

Ascend Performance Materials Operations LLC - *Polyamide 6*

General Information

Product Description

Vydyne B 60 GF BK EST KW2 is standard flow, organic heat stabilized, 60% glass-fiber reinforced PA6 resin. Available in black, 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, 60% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	
Features	• Chemical Resistant • Gasoline Resistant • General Purpose	• Good Flow • Good Heat Resistance • Heat Stabilized	• Heat Stabilized - Organic • Lubricated
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA6-GF60		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.69	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.50	--	%	
Flow : 73°F, 0.0787 in	0.40	--	%	
Water Absorption (24 hr, 73°F)	1.0	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.1	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	3.07E+6	2.15E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	32800	23100	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.0	3.7	%	ISO 527-2
Flexural Modulus (73°F)	3.12E+6	2.15E+6	psi	ISO 178
Flexural Stress (73°F)	53800	35500	psi	ISO 178
Poisson's Ratio (73°F)	0.32	--		ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	8.1	8.1	ft·lb/in²	
-22°F	8.1	8.1	ft·lb/in²	
73°F	8.1	10	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	42	41	ft·lb/in²	
-22°F	42	41	ft·lb/in²	
73°F	42	43	ft·lb/in²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	8.1	8.1	ft·lb/in²	
-22°F	8.1	8.6	ft·lb/in²	
73°F	8.1	10	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	428	423	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	417	406	°F	ISO 75-2/A
Melting Temperature	428	--	°F	ISO 11357-3

CLTE - Flow (73 to 131°F, 0.0787 in)	7.2E-6	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	3.8E-5	--	in/in/°F	ISO 11359-2
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Electric Strength (0.0394 in)	660	640	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	575	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.06 in	HB	--		
0.12 in	HB	--		

Processing Information

Injection	**Dry**	**Unit**
Drying Temperature	176 to 194	°F
Drying Time	> 3.0	hr
Rear Temperature	446 to 536	°F
Middle Temperature	446 to 536	°F
Front Temperature	446 to 536	°F
Nozzle Temperature	446 to 536	°F
Processing (Melt) Temp	446 to 536	°F
Mold Temperature	176 to 194	°F

Notes

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