Vydyne® B 55 GF BK EST K1

Ascend Performance Materials Operations LLC - *Polyamide 6*

General Information

Product Description

Vydyne B 55 GF BK EST K1 is standard flow, heat stabilized, 55% 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, 55% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	
Features	• Chemical Resistant • Gasoline Resistant • General Purpose	• Good Flow • Heat Stabilized • High Heat Resistance	• Lubricated
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA6-GF55		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.63	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.50	--	%	
Flow : 73°F, 0.0787 in	0.20	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	1.5	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	2.57E+6	1.84E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	31600	21800	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.4	5.3	%	ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Notched Izod Impact Strength (73°F)	8.1	11	ft·lb/in²	ISO 180/1A
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	428	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	419	--	°F	ISO 75-2/A
Melting Temperature	428	--	°F	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Comparative Tracking Index (0.118 in)	450	--	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 500	°F
Middle Temperature	446 to 500	°F
Front Temperature	446 to 500	°F
Nozzle Temperature	446 to 500	°F
Processing (Melt) Temp	446 to 500	°F
Mold Temperature	176 to 194	°F