

Vydyne® B 30 GF BK EST K1

polyamide 6



Vydyne B 30 GF BK EST K1 is standard flow, heat stabilized, 30% glass-fiber reinforced PA6 resin. Available in black, this product is also lubricated for improved machine feed and flow.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Heat Stabilizer	• Lubricant	
Features	• Chemical Resistant • Good Flow	• Gasoline Resistant • High Heat Resistance	• General Purpose • Lubricated
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.35	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	0.7	*	%	
Flow : 23°C, 2.00 mm	0.3	*	%	
Water Absorption				ISO 62
23°C, 24 hr	1.3	*	%	
Equilibrium, 23°C, 50% RH	1.9	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	9200	6000	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	170	105	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	3	6.5	%	ISO 527-2
Flexural Modulus (23°C)	10300	5700	MPa	ISO 178
Flexural Strength (23°C)	245	135	MPa	ISO 178
Poisson's Ratio (23°C)	0.35		-	ISO 527-2

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	14	20	kJ/m ²	
-30°C	14	11	kJ/m ²	
-40°C	9.7	9.3	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	89	99	kJ/m ²	
-30°C	75	91	kJ/m ²	
-40°C	75	76	kJ/m ²	

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Notched Izod Impact Strength

ISO 180/1A

+23°C	13	21	kJ/m²
-30°C	11	12	kJ/m²
-40°C	9.3	10	kJ/m²

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	207	197	°C	
0.45 MPa, Unannealed	220	219	°C	
Melting Temperature	220	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	23	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	84	*	E-6/K	

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	28	26	kV/mm	IEC 60243
Comparative Tracking Index (3.00 mm)	450		V	IEC 60112

Flammability	Value	Test Standard
Flammability		UL 94
1.50 mm	HB	
3.00 mm	HB	

Injection	Value	Unit
Drying Temperature	90 - 100	°C
Drying Time	≥ 3	h
Rear Temperature	230 - 280	°C
Middle Temperature	230 - 280	°C
Front Temperature	230 - 280	°C
Nozzle temperature	230 - 280	°C
Processing (Melt) Temperature	230 - 280	°C
Mold Temperature	80 - 90	°C

