

Vydyne® STAT B 20 FC BK

polyamide 6



Vydyne STAT B 20 FC BK is standard flow, 20% carbon-fiber reinforced PA6 resin. This product shows high stiffness and strength. It is also electrically conductive.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Lubricant		
Features	• Bromine Free • Good Dimensional Stability • Good Rigidity • Good Tensile Strength • Lubricated • Oil Resistant	• Chemical Resistant • Good Electrical Properties • Good Stiffness • Halogen Content, None • Medium Viscosity	• General Purpose • Good Processability • Good Strength • Homopolymer • Non-Corrosive
Agency Rating	• ISO, 1043 PA6 20CF		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.22	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	0.4	*	%	
Flow : 23°C, 2.00 mm	0.2	*	%	
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	2.3	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	12800	-	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	155	-	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2	-	%	ISO 527-2

Impact

	dry	cond.	Unit	Test Standard
Notched Izod Impact Strength, +23°C	8.5	-	kJ/m ²	ISO 180/1A

Thermal

	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	205	-	°C	
0.45 MPa, Unannealed	210	-	°C	
Melting Temperature	222	*	°C	ISO 11357-3

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Electrical	dry	cond.	Unit	Test Standard
Volume Resistivity (1.00 mm)	10	-	Ohm*m	IEC 60093

Flammability	Value	Test Standard
Flammability		UL 94
0.800 mm	HB	
1.60 mm	HB	
3.20 mm	HB	

Injection	Value	Unit
Drying Temperature	80 - 110	°C
Drying Time	3 - 4	h
Rear Temperature	230 - 255	°C
Middle Temperature	235 - 260	°C
Front Temperature	240 - 260	°C
Nozzle temperature	240 - 260	°C
Processing (Melt) Temperature	240 - 260	°C
Mold Temperature	70 - 95	°C

