

Vydyne® 23HST BK0891

polyamide 66



Vydyne 23HST BK0891 is an unfilled, heat-stabilized, lubricated injection-molding PA66 grade exhibiting high-toughness, excellent flow, and fast cycle time. 23HST BK0891 is designed principally for thin part molding such as cable ties fasteners. This product offers the main benefits of PA66 such as high strength, rigidity, and maintains flame resistance with excellent toughness in cold and dry environments.

General

Regional Availability	• North America • South and Central America	• Europe • Near East/Africa	• Asia Pacific
Additive	• Heat Stabilizer	• Lubricant	• Release agent
Features	• Abrasion Resistance • Gasoline Resistant • Heat Aging Resistant • High Strength • Solvent Resistant	• Chemical Resistant • General Purpose • Heat Stabilized • Low Temperature Toughness • Weatherable	• Fast Molding Cycle • Good Mold Release • High Rigidity • Lubricated
Agency Rating	• ASTM, D4066 PA0180B4432 • SAE, J1639 PA0121	• ASTM, D6779 PA0180B4432	• ISO, 1043 PA66-T
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.14	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.8	*	%	
Flow : 23°C, 2.00 mm	1.8	*	%	
Water Absorption				ISO 62
23°C, 24 hr	2.1	*	%	
Equilibrium, 23°C, 50% RH	2	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	2600	1200	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	71	47	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	48	41	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	4.7	21	%	ISO 527-2
Tensile Strain (Break, 23°C)	31	>50	%	ISO 527-2
Flexural Modulus (23°C)	2900	1100	MPa	ISO 178
Flexural Strength (23°C)	84	29	MPa	ISO 178

Vydyne® 23HST BK0891

polyamide 66



Poisson's Ratio (23°C)	0.38	-	ISO 527-2	
Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	11	23	kJ/m²	
-30°C	6.1	7.4	kJ/m²	
-40°C	5.2	5.9	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	N	N	kJ/m²	
-30°C	N	N	kJ/m²	
-40°C	N	N	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	9.2	19	kJ/m²	
-30°C	8.5	9.1	kJ/m²	
-40°C	6.2	8.5	kJ/m²	
Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	66	-	°C	
0.45 MPa, Unannealed	196	-	°C	
Melting Temperature	260	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	77	*	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)	29	27	kV/mm	IEC 60243
Injection	Value		Unit	
Drying Temperature	75 - 85		°C	
Drying Time	4 - 8		h	
Suggested Max Regrind	20		%	
Suggested Max Moisture	0.15		%	
Rear Temperature	260 - 280		°C	
Middle Temperature	270 - 285		°C	
Front Temperature	280 - 290		°C	
Nozzle temperature	280 - 300		°C	
Processing (Melt) Temperature	285 - 300		°C	

+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

Vydyne® 23HST BK0891

polyamide 66



Mold Temperature

65 - 95

°C

