Vydyne® 22HSPCN BK0815

polyamide 66

Vydyne 22HSPCN BK0815 is a general-purpose, unfilled, lubricated, heat stabilized PA66 resin. Designed principally for injection-molding fabrication, this product offers a combination of engineering properties characterized by high strength; rigidity; good toughness; high melt point; good surface lubricity; abrasion resistance; and resistance to many chemicals, machine and motor oils, solvents and gasoline. This product is designed to resist thermal degradation when exposed to warm climates.

General

Additive	• Heat Stabilizer	• Lubricant	
Features	• Abrasion Resistance	• Chemical Resistant	• Fast Molding Cycle
	• Gasoline Resistant	• General Purpose	• Good Mold Release
	• Good Toughness	• Heat Stabilized	• High Rigidity
	• High Strength	• Lubricated	• Oil Resistant
	• Solvent Resistant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	dry	cond.	Unit	Test Standard
Density	1.14	-	g/cm³	ISO 1183

Mechanical	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	3100	1600	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	89	57	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	81	48	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	4.8	20	%	ISO 527-2
Tensile Strain (Break, 23°C)	25	76	%	ISO 527-2
Flexural Modulus (23°C)	3200	1100	MPa	ISO 178
Flexural Strength (23°C)	102	29	MPa	ISO 178

Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	4.1	11	kJ/m²	
-30°C	2.8	2.7	kJ/m²	
-40°C	3.3	2.8	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	4.1	8.4	kJ/m²
-30°C	4.1	5	kJ/m²
-40°C	3.9	4.7	kJ/m²

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	70	83	°C	
0.45 MPa, Unannealed	208	195	°C	
Melting Temperature	260	*	°C	ISO 11357-3

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	29	-	kV/mm	IEC 60243

Flammability	dry	cond.	Unit	Test Standard
Burning Rate, 2.00 mm			mm/min	ISO 3795
Oxygen index	24	*	%	EN ISO 4589-2

Injection	Value	Unit
Drying Temperature	≤ 70	°C
Drying Time	1 - 3	h
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
Mold Temperature	65 - 95	°C

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CAUTION: Do not use Ascend Performance Materials Operations MED grades in medical applications involving implantation in the human body or contact with internal body fluids or tissues for extended periods of time.