

Vydyne® 22HSPCN NT0856

polyamide 66



Vydyne 22HSPCN NT0856 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

Regional Availability	• Asia Pacific		
Additive	• Heat Stabilizer	• Lubricant	• Release agent
Features	• Abrasion Resistance • General Purpose • Good Strength • Thermal Stability	• Chemical Resistant • Good Heat Resistance • Good Tensile Strength	• Gasoline Resistant • Good Stiffness • Lubricated
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	dry	cond.	Unit	Test Standard
Density	1.13	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.7	*	%	
Flow : 23°C, 2.00 mm	1.6	*	%	
Water Absorption				ISO 62
23°C, 24 hr	1.7	*	%	
Equilibrium, 23°C, 50% RH	2.9	*	%	

Mechanical	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	3300	1200	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	87	52	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	55	46	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	4.9	22	%	ISO 527-2
Tensile Strain (Break, 23°C)	22	>50	%	ISO 527-2
Flexural Modulus (23°C)	3000	1000	MPa	ISO 178
Flexural Strength (23°C)	104	31	MPa	ISO 178
Poisson's Ratio (23°C)	0.4		-	ISO 527-2

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Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	4.6	18	kJ/m ²	
-30°C	4.9	4.7	kJ/m ²	
-40°C	4.1	4	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	N	N	kJ/m ²	
-30°C	N	N	kJ/m ²	
-40°C	N	N	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	4.8	19	kJ/m ²	
-30°C	4.7	5.2	kJ/m ²	
-40°C	4.5	5.1	kJ/m ²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	67	-	°C	
0.45 MPa, Unannealed	199	-	°C	
Melting Temperature	260	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	112	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	103	*	E-6/K	

Electrical	dry	cond.	Unit	Test Standard
Volume Resistivity (1.00 mm)	2.44E15	4.19E10	Ohm*m	IEC 60093
Dielectric Strength (1.00 mm)	30	23	kV/mm	IEC 60243

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

