

Vydyne® 47H BK0644 polyamide 66



Vydyne 47H BK0644 product description to come.

To come

Typical Applications/End Uses:

General				
Material Status	• Commercial: Active			
Availability	• Asia Pacific	• Europe	• North America	
Additive	• Impact Modifier			
Features	• Gasoline Resistance • General Purpose • Good Abrasion Resistance • Good Chemical Resistance	• Good Processability • Good Toughness • High Impact Resistance • Impact Modified	• Low Temperature Impact Resistance • Low Temperature Toughness • Oil Resistant • Solvent Resistant	
Uses	• Automotive Applications • Connectors • Consumer Applications	• Electrical/Electronic Applications • Fasteners • Gears	• Industrial Applications	
Agency Ratings	• ASTM D 4066 PA0161	• ASTM D 6779 PA0161		
Appearance	• Black			
Forms	• Pellets			
Processing Method	• Injection Molding			
Physical	Dry	Conditioned	Unit	Test Method
Density	1.10	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.6	--	%	
Flow : 73°F, 0.0787 in	1.8	--	%	
Water Absorption (73°F, 24 hr)	1.2	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.3	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	403000	252000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	8700	6530	psi	ISO 527-2
Tensile Stress (Break, 73°F)	7540	5800	psi	ISO 527-2
Tensile Strain (Break, 73°F)	22	60	%	ISO 527-2
Flexural Modulus (73°F)	334000	113000	psi	ISO 178
Flexural Strength (73°F)	10200	3480	psi	ISO 178

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	5.2	8.6	ft·lb/in ²	
-22°F	8.1	11	ft·lb/in ²	
73°F	9.0	30	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	No Break	No Break		
73°F	No Break	No Break		
Notched Izod Impact Strength				ISO 180
-40°F	5.7	8.6	ft·lb/in ²	
-22°F	7.6	11	ft·lb/in ²	
73°F	8.6	21	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	365	--	°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	145	--	°F	
Melting Temperature	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	6.2E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	7.6E-5	--	in/in/°F	ISO 11359-2
RTI Elec				UL 746
0.0295 in	266	--	°F	
0.0591 in	266	--	°F	
0.118 in	266	--	°F	
RTI Imp				UL 746
0.0295 in	167	--	°F	
0.0591 in	167	--	°F	
0.118 in	167	--	°F	
RTI Str				UL 746
0.0295 in	239	--	°F	
0.0591 in	239	--	°F	
0.118 in	239	--	°F	

Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity (0.0295 in)	1.0E+11	--	ohm-cm	IEC 60093
Dielectric Strength (0.0394 in)	300	--	V/mil	IEC 60243
Arc Resistance	PLC 6	--		ASTM D495
Comparative Tracking Index (0.118 in)	525	--	V	IEC 60112
High Amp Arc Ignition (HAI)				UL 746
0.0295 in	PLC 0	--		
0.0591 in	PLC 0	--		
0.118 in	PLC 0	--		
High Voltage Arc Tracking Rate (HVTR)	PLC 2	--		UL 746
Hot-wire Ignition (HWI)				UL 746
0.0295 in	PLC 4	--		
0.0591 in	PLC 4	--		
0.118 in	PLC 3	--		
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.0295 in	HB	--		
0.0591 in	HB	--		
0.118 in	HB	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.0295 in	1290	--	°F	
0.0591 in	1430	--	°F	
0.118 in	1290	--	°F	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.0295 in	1340	--	°F	
0.0591 in	1470	--	°F	
0.118 in	1340	--	°F	
Injection	Dry Unit			
Drying Temperature	176 °F			
Drying Time	4.0 hr			
Suggested Max Regrind	25 %			
Rear Temperature	536 to 590 °F			
Middle Temperature	536 to 590 °F			
Front Temperature	536 to 590 °F			
Nozzle Temperature	536 to 590 °F			
Processing (Melt) Temp	545 to 581 °F			
Mold Temperature	149 to 203 °F			

Notes

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North America

+1 888 927 2363

Europe

+32 10 608 600

Asia

+86 21 6340 3300

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