

Vydyne® A 10 GF BK KW2

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

Vydyne A 10 GF BK KW2 is standard flow, organic heat stabilized, 10% glass-fiber reinforced PA66 resin. This product is also lubricated for improved machine feed and flow and maintains the excellent resistance typical of PA66 in chemicals, machine and motor oils, solvents, and gasoline.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	
Features	<ul style="list-style-type: none"> • Balanced Stiffness/Toughness • Bromine Free • Chemical Resistant • Electrical Corrosion Resistant • Fatigue Resistant • Gasoline Resistant • General Purpose • Good Color Stability • Good Electrical Properties 	<ul style="list-style-type: none"> • Good Flow • Good Heat Resistance • Good Impact Resistance • Good Processability • Good Rigidity • Good Strength • Good Surface Finish • Good Tensile Strength • Good Thermal Stability 	<ul style="list-style-type: none"> • Halogen Free • Heat Stabilized • Heat Stabilized - Organic • Homopolymer • Lubricated • Medium Viscosity • Non-Corrosive
Agency Ratings	• ISO 1043 PA66 GF10		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	• Profile Extrusion
Resin ID	• PA66-GF10		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow : 73°F, 0.0787 in	1.1	%	
Flow : 73°F, 0.0787 in	0.70	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	2.3	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	769000	psi	ISO 527-1
Tensile Stress (Break, 73°F)	16000	psi	ISO 527-2
Tensile Strain (Break, 73°F)	5.0	%	ISO 527-2
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	473	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	455	°F	ISO 75-2/A
Melting Temperature	500	°F	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index (0.118 in)	575	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		HB	
0.13 in		HB	
Glow Wire Flammability Index (0.08 in)	1200	°F	IEC 60695-2-12



Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176 to 230	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	518 to 563	°F
Middle Temperature	527 to 563	°F
Front Temperature	536 to 572	°F
Nozzle Temperature	536 to 572	°F
Processing (Melt) Temp	536 to 563	°F
Mold Temperature	158 to 203	°F
Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	491 to 509	°F
Cylinder Zone 2 Temp.	500 to 518	°F
Cylinder Zone 3 Temp.	518 to 536	°F
Cylinder Zone 4 Temp.	527 to 554	°F
Cylinder Zone 5 Temp.	527 to 554	°F
Melt Temperature	518 to 536	°F
Die Temperature	518 to 536	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

