

Vydyne® AG10

 Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

Vydyne AG10 is a 50% glass fiber reinforced PA66 for injection molded applications.

General

Material Status	• Commercial: Active
Availability	• Europe • North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Additive	• Heat Stabilizer • Mold Release
Features	• Good Stiffness • Good Strength • Heat Stabilized
Agency Ratings	• ISO 1043 PA66 GF50
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA66-GF50

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.58	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F)	2.5	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.70	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	2.15E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	30500	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.0	%	ISO 527-2
Flexural Modulus (73°F)	2.00E+6	psi	ISO 178
Flexural Stress (73°F)	45000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength (73°F)	67	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact Strength			ISO 180/1A
-40°F	6.2	ft·lb/in ²	
-22°F	6.2	ft·lb/in ²	
73°F	7.1	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
CLTE - Flow (73 to 131°F, 0.0787 in)	1.1E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	3.9E-5	in/in/°F	ISO 11359-2
RTI Elec			UL 746B
0.030 in	149	°F	
0.12 in	149	°F	
RTI Imp			UL 746B
0.030 in	149	°F	
0.12 in	149	°F	
RTI Str			UL 746B
0.030 in	149	°F	
0.12 in	149	°F	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (0.0394 in)	1.0E+16	ohm·cm	IEC 60093
Comparative Tracking Index (0.118 in)	500	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method



Flame Rating		UL 94
0.030 in	HB	
0.12 in	HB	
Glow Wire Flammability Index (0.08 in)	35.6 °F	IEC 60695-2-12
Oxygen Index	27 %	ISO 4589-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	500 to 536	°F
Middle Temperature	518 to 536	°F
Front Temperature	518 to 554	°F
Processing (Melt) Temp	518 to 554	°F
Mold Temperature	140 to 194	°F

Notes

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

