

Vydyne® AG10K

polyamide 66



Vydyne AG10K is a 50% glass fiber reinforced, heat and hydrolytically stabilized PA66 for injection molded applications.

General

Regional Availability	• North America	• Europe
Additive	• Heat Stabilizer	• Release agent
Features	• Good Strength	• Outstanding Surface Finish
Certifications	• Drinking water contact	• Drinking water contact KTW • Drinking water contact DVGW W270
	• Drinking water contact NSF	
Appearance	• Natural Color	• Black
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical

	dry	cond.	Unit	Test Standard
Density	1.55	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	0.7	*	%	
Flow : 23°C, 2.00 mm	0.3	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.8	*	%	
Equilibrium, 23°C, 50% RH	1.2	*	%	
Water Absorption, Saturation, 23°C	2.5		%	ISO 62

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	15700	12500	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	219	165	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.6	3.5	%	ISO 527-2
Flexural Modulus (23°C)	16100	11800	MPa	ISO 178
Flexural Strength (23°C)	335	240	MPa	ISO 178

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	14	18	kJ/m ²	
-30°C	14	13	kJ/m ²	
-40°C	15	12	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	89	97	kJ/m ²	
-30°C	83	83	kJ/m ²	

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-40°C	83	79	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	14	17	kJ/m²	
-30°C	13	13	kJ/m²	
-40°C	11	12	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	253	-	°C	
0.45 MPa, Unannealed	261	-	°C	
Melting Temperature	260	*	°C	ISO 11357-3
RTI Elec				UL 746
0.750 mm	65		°C	
3.00 mm	65		°C	
RTI Imp				UL 746
0.750 mm	65		°C	
3.00 mm	65		°C	
RTI Str				UL 746
0.750 mm	65		°C	
3.00 mm	65		°C	

Electrical	dry	cond.	Unit	Test Standard
Volume Resistivity (1.00 mm)	1E14	-	Ohm*m	IEC 60093
Dielectric Strength (1.00 mm)	26	24	kV/mm	IEC 60243

Flammability	Value	Test Standard
Flammability		UL 94
0.750 mm	HB	
3.00 mm	HB	

Injection	Value	Unit
Drying Temperature	75 - 85	°C
Drying Time	4	h
Suggested Max Moisture	0.2	%
Rear Temperature	260 - 280	°C
Middle Temperature	270 - 280	°C
Front Temperature	270 - 290	°C
Processing (Melt) Temperature	270 - 290	°C

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Mold Temperature

60 - 90

°C

