

Vydyne® AG7K

polyamide 66



Vydyne AG7K is a 35% 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
Agency Rating	• ISO, 1043 PA66 GF35	
Certifications	• Drinking water contact	• Drinking water contact KTW • Drinking water contact DVGW W270
Appearance	• Natural Color	• Black
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical

	dry	cond.	Unit	Test Standard
Density	1.42	-	g/cm ³	ISO 1183
Water Absorption				ISO 62
23°C, 24 hr	0.8	*	%	
Equilibrium, 23°C, 50% RH	1.4	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	12500	9200	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	211	155	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	3.5	4.3	%	ISO 527-2
Flexural Modulus (23°C)	11400	8300	MPa	ISO 178
Flexural Strength (23°C)	308	191	MPa	ISO 178

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	16	19	kJ/m ²	
-30°C	13	13	kJ/m ²	
-40°C	12	12	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	107	112	kJ/m ²	
-30°C	91	102	kJ/m ²	
-40°C	87	102	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	14	17	kJ/m ²	
-30°C	14	12	kJ/m ²	

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-40°C	11	13	kJ/m²	
Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	253	248	°C	
0.45 MPa, Unannealed	262	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
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)	30	29	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	
Mold Temperature	60 - 90		°C	

