

Vydyne® AVS4CF1 BK0877

polyamide 66



Vydyne AVS4CF1 BK0877 is a 50% glass filled PA66 based heat stabilized grade that provides improved NVH damping over standard glass-filled PA66.

General

Regional Availability	• North America • South and Central America	• Europe • Near East/Africa	• Asia Pacific
Additive	• Heat Stabilizer		
Features	• Good Rigidity • High Flow	• Good Tensile Strength	• Heat Stabilized
Agency Rating	• ASTM, D4066 PA0100A6658	• ASTM, D6779 PA0100A6658	• ISO, 1043 PA66 GF50
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.60	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.1	*	%	
Flow : 23°C, 2.00 mm	0.6	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.8	*	%	
Equilibrium, 23°C, 50% RH	1.1	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	17000	14000	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	222	168	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.1	2.9	%	ISO 527-2
Flexural Modulus (23°C)	16700	13800	MPa	ISO 178
Flexural Strength (23°C)	332	265	MPa	ISO 178
Poisson's Ratio (23°C)	0.33		-	ISO 527-2

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	15	14	kJ/m ²	
-30°C	13	11	kJ/m ²	
-40°C	12	11	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU

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+23°C	82	82	kJ/m²
-30°C	82	72	kJ/m²
-40°C	75	71	kJ/m²
Notched Izod Impact Strength			ISO 180/1A
+23°C	15	14	kJ/m²
-30°C	14	12	kJ/m²
-40°C	12	12	kJ/m²

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	249	246	°C	
0.45 MPa, Unannealed	260	256	°C	
Melting Temperature	260	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	17	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	71	*	E-6/K	

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	25	24	kV/mm	IEC 60243

Injection	Value	Unit
Drying Temperature	80	°C
Drying Time	4	h
Rear Temperature	280 - 310	°C
Middle Temperature	280 - 310	°C
Front Temperature	280 - 310	°C
Nozzle temperature	280 - 310	°C
Processing (Melt) Temperature	285 - 305	°C
Mold Temperature	65 - 95	°C

