

**Product Texts**

Vydyne AVS1AF1 BK0781 is a 50% glass fiber reinforced, heat-stabilized PA66 designed for injection molding applications. AVS1AF1 BK0781 offers improved flow with a black surface finish and maintains the excellent resistance typical of PA66 in chemicals, machine and motor oils, solvents, and gasoline. Application targets include automotive mounts, brackets and suspension components.

Vydyne AVS1AF1 BK0781 has been characterized in anisotropic tensile tests as well as anisotropic fatigue. Material data and models are available at Ascend Performance Materials and in Digimat®-MX.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	16800 / 12600	MPa	ISO 527
<sup>[C]</sup> Stress at break	240 / 180	MPa	ISO 527
<sup>[C]</sup> Strain at break	2.5 / 3.5	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	95 / 110	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	91 / 95	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	15 / 21	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	14 / 15	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	255 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	260 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	12 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	100 / *	E-6/K	ISO 11359-1/-2
Thickness tested	1.5 / *	mm	-
<sup>[C]</sup> Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Comparative tracking index	500 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	0.5 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	1.2 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1580 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets, Black

**Chemical Resistance**

General Chemical Resistance, Solvent Resistance, Oil Resistance

**Applications**

Automotive

**Special Characteristics**

Heat stabilized or stable to heat

**Regional Availability**

North America, Europe, Asia Pacific