

**Product Texts**

Vydyne AVS1AF1 NT0840 is a 50% glass fiber reinforced, heat-stabilized PA66 designed for injection molding applications. AVS1AF1 NT0840 offers improved flow with a natural color 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 NT0840 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	17600 / 14300	MPa	ISO 527
<sup>[C]</sup> Stress at break	254 / 205	MPa	ISO 527
<sup>[C]</sup> Strain at break	2.3 / 3	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	100 / 111	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	100 / 102	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	16 / 19	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	16 / 16	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	252 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	261 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	13 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	63 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Electric strength	35 / 24	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	1.16 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1600 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets, Natural Color

**Additives**

Lubricants

**Chemical Resistance**

General Chemical Resistance, Solvent Resistance, Oil Resistance

**Applications**

Automotive

**Regional Availability**

North America, Europe, Asia Pacific

**Special Characteristics**

Heat stabilized or stable to heat