

Product Texts

Vydyne 21SPF is a general-purpose, unfilled, lubricated PA66 resin with an enhanced crystallization temperature. Designed principally to decrease cycle time for injection-molding fabrication, this product offers a combination of engineering properties characterized by high strength; rigidity; good toughness; high melt point; good surface lubricity; abrasion resistance; and resistance to many chemicals, machine and motor oils, solvents and gasoline.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	2.0 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	2.0 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2900 / 1900	MPa	ISO 527
^[C] Yield stress	89 / 60	MPa	ISO 527
^[C] Yield strain	4.8 / 20	%	ISO 527
^[C] Charpy impact strength, +23°C	N / N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N / N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	6 / 23	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	5 / 7	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	72 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	210 / *	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	100 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	100 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
^[C] Burning Behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	-
^[C] Oxygen index	26 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E11 / -	Ohm*m	IEC 62631-3-1
^[C] Electric strength	26 / -	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Water absorption	1.2 / *	%	Sim. to ISO 62
^[C] Humidity absorption	2.4 / *	%	Sim. to ISO 62
^[C] Density	1140 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Chemical Resistance

General Chemical Resistance, Solvent Resistance, Oil Resistance

Delivery form

Pellets, Natural Color

Additives

Lubricants, Release agent

Features

Color Stability

Certifications

Food contact, Food approval 10/2011, Food approval FDA 21 CFR, Drinking water contact, Drinking water contact NSF 61

Applications

Automotive, Electrical and Electronical, General Purpose

Regional Availability

North America, Europe, Asia Pacific