

**Product Texts**

Vydyne R530J BK0723 is a black, 30% glass filled, high flow, PA66 that contains an electrically neutral heat stabilizer. It is specifically designed for electrical applications requiring high dielectric strength, low conductivity, corrosion resistance, and laser markability.

**Processing/Physical Characteristics**

	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.5 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	1.3 / *	%	ISO 294-4, 2577

[C]: CAMPUS

**Mechanical properties**

	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	9800 / 6900	MPa	ISO 527
<sup>[C]</sup> Stress at break	177 / 127	MPa	ISO 527
<sup>[C]</sup> Strain at break	2.6 / 4	%	ISO 527
Flexural modulus, 23°C	9600 / 6000	MPa	ISO 178
Flexural strength	270 / 190	MPa	ISO 178
<sup>[C]</sup> Charpy impact strength, +23°C	54 / 74	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	53 / 50	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	9.4 / 10	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	8.2 / 7.8	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C	12 / 13	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength Temperature	10 / 11 -30	kJ/m <sup>2</sup> °C	ISO 180/1A -

[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	19 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	73 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn. Thickness tested	HB / * 1.5 / *	class mm	IEC 60695-11-10 -
<sup>[C]</sup> Burning Behav. at thickness h Thickness tested	HB / * 0.8 / *	class mm	IEC 60695-11-10 -
<b>ASTM Data</b>			
UL 94 Flame rating Thickness tested	HB 0.75	- mm	UL 94 -

[C]: CAMPUS

**Electrical properties**

	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Volume resistivity	1E11 / -	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Electric strength	39 / 29	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	600 / -	-	IEC 60112
<b>ASTM Data</b>			
Arc Resistance	150 / -	s	ASTM D 495

[C]: CAMPUS

**Other properties**

	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	0.84 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	1.9 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1370 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>80</b>	°C	-
Pre-drying - Time	<b>4</b>	h	-
Melt temperature	<b>285 - 305</b>	°C	-
Mold temperature	<b>65 - 95</b>	°C	-
Zone 1	<b>280 - 310</b>	°C	-
Zone 2	<b>280 - 310</b>	°C	-
Zone 3	<b>280 - 310</b>	°C	-
Nozzle temperature	<b>280 - 310</b>	°C	-

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets, Black

**Additives**

Release agent

**Special Characteristics**

Heat stabilized or stable to heat

**Features**

Laser Markable

**Chemical Resistance**

General Chemical Resistance

**Applications**

Automotive, Electrical and Electronical

**Regional Availability**

North America, Europe, Asia Pacific