+135-3858-6433 (GuangDong)
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Vydyne® R515J BK0690

polyamide 66

Vydyne R515J BK0690 is a black, 15% 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.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Heat Stabilizer	• Lubricant	
Features	• Chemical Resistant • Good Electrical Properties • High Strength • Organic Heat Stabilized	• Corrosion Resistant • Good Mold Release • Laser Markable	• Good Colorability • High Flow • Lubricated
Agency Rating	• ASTM, D4066 PA012G15	• ASTM, D6779 PA012G15	
UL File Number	• E70062		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	dry	cond.	Unit	Test Standard
Density	1.24	-	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.1	*	%	
Flow : 23°C, 2.00 mm	0.7	*	%	
Water Absorption				ISO 62
23°C, 24 hr	1.3	*	%	
Equilibrium, 23°C, 50% RH	1.9	*	%	

Mechanical	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	5700	4700	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	115	82	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.3	3	%	ISO 527-2
Flexural Modulus (23°C)	5900	3800	MPa	ISO 178
Flexural Strength (23°C)	171	101	MPa	ISO 178
Poisson's Ratio (23°C)	0.36		-	ISO 527-2

Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	4.8	4.8	kJ/m²	
-30°C	4.5	4.4	kJ/m²	

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-40°C	4.4	4.2	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	29	48	kJ/m²	
-30°C	28	28	kJ/m²	
-40°C	28	27	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	4.3	4.3	kJ/m²	
-30°C	4.1	3.7	kJ/m²	
-40°C	4.2	3.8	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	243	238	°C	
0.45 MPa, Unannealed	259	259	°C	
Melting Temperature	260	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	30	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	77	*	E-6/K	
RTI Elec				UL 746
0.750 mm	120		°C	
1.50 mm	120		°C	
3.00 mm	120		°C	
RTI Imp				UL 746
0.750 mm	85		°C	
1.50mm	85		°C	
3.00 mm	105		°C	
RTI Str				UL 746
0.750 mm	115		°C	
1.50 mm	120		°C	
3.00 mm	120		°C	

Electrical	dry	cond.	Unit	Test Standard
Volume Resistivity (1.00 mm)	1E11	-	Ohm*m	IEC 60093
Dielectric Strength (1.00 mm)	27	24	kV/mm	IEC 60243
Arc Resistance (3.00 mm)	5		-	ASTM D 495
Comparative Tracking Index (3.00 mm)	600		V	IEC 60112
High Amp Arc Ignition (HAI)				UL 746
0.750 mm	PLC 4		-	
1.50 mm	PLC 4		-	

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3.00 mm	PLC 4	-	
High Voltage Arc Tracking Rate (HVTR), 3.00 mm	PLC 1	-	UL 746

Flammability	Value		Test Standard
Flammability			UL 94
0.750 mm	HB		
1.50 mm	HB		
3.00 mm	HB		

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