

Vydyne® R525J NT0721

Polyamide 66

Ascend Performance Materials Operations LLC

Message:

R525J NT0721 is a natural, 25% glass-filled, high-flow PA66 that is heat-stabilized with an electrically neutral heat stabilizer. It is specially designed for electrical applications requiring high dielectric strength, low conductivity and corrosion resistance.

General Information				
UL YellowCard		E70062-102672741		
Filler / Reinforcement		Glass fiber reinforced material, 25% filler by weight		
Additive		heat stabilizer		
Features		High strength		
		Laser marking		
		Good electrical performance		
		Good corrosion resistance		
		Good coloring		
		High liquidity		
		Good chemical resistance		
		Thermal Stability		
		Good demoulding performance		
Uses		Lighting Applications		
		Thin wall parts		
		Electrical/Electronic Applications		
		Engineering application		
		Active hinge		
		Home appliance components		
		Connector		
		Application in Automobile Field		
Agency Ratings		ASTM D 4066 PA012G25		
		ASTM D 6779 PA012G25		
Appearance		Natural color		
Forms		Particle		
Processing Method		Injection molding		
Physical	Dry	Conditioned	Unit	Test Method
Density	1.32	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Lateral flow: 23°C, 2.00mm	0.90	--	%	ISO 294-4

Traffic: 23°C, 2.00mm	0.40	--	%	ISO 294-4
Water Absorption				ISO 62
23°C, 24 hr	0.90	--	%	ISO 62
Equilibrium, 23°C, 50% RH	2.0	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	8600	5500	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	174	117	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	3.0	7.0	%	ISO 527-2
Flexural Modulus (23°C)	7700	5700	MPa	ISO 178
Flexural Stress (23°C)	250	150	MPa	ISO 178
Poisson's Ratio	0.40	--		ISO 527-2
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	10	10	kJ/m ²	ISO 179/1eA
23°C	11	12	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	55	66	kJ/m ²	ISO 179/1eU
23°C	65	67	kJ/m ²	ISO 179/1eU
Notched Izod Impact				ISO 180
-30°C	9.0	10	kJ/m ²	ISO 180
23°C	10	15	kJ/m ²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, not annealed	258	--	°C	ISO 75-2/B
1.8 MPa, not annealed	245	--	°C	ISO 75-2/A
Melting Temperature	260	--	°C	ISO 11357-3
Linear thermal expansion coefficient				ISO 11359-2
Flow: 23 to 55°C, 2.00mm	2.5E-5	--	cm/cm/°C	ISO 11359-2
Lateral: 23 to 55°C, 2.00mm	1.1E-4	--	cm/cm/°C	ISO 11359-2
RTI Elec				UL 746
0.75 mm	120	--	°C	UL 746
1.5 mm	120	--	°C	UL 746
3.0 mm	120	--	°C	UL 746
RTI Imp				UL 746
0.75 mm	85.0	--	°C	UL 746
1.5 mm	85.0	--	°C	UL 746
3.0 mm	105	--	°C	UL 746

RTI				UL 746
0.75 mm	115	--	°C	UL 746
1.5 mm	120	--	°C	UL 746
3.0 mm	120	--	°C	UL 746
Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity (0.750 mm)	1.0E+13	--	ohms·cm	IEC 60093
Dielectric Strength (1.00 mm)	24	--	kV/mm	IEC 60243
Arc Resistance (3.00 mm)	PLC 5	--		ASTM D495
Comparative Tracking Index (3.00 mm)	600	--	V	IEC 60112
High Amp Arc Ignition (HAI)				UL 746
0.75 mm	PLC 0	--		UL 746
1.5 mm	PLC 0	--		UL 746
3.0 mm	PLC 0	--		UL 746
High Voltage Arc Tracking Rate (HVTR)	PLC 1	--		UL 746
Hot-wire Ignition (HWI)				UL 746
0.75 mm	PLC 4	--		UL 746
1.5 mm	PLC 4	--		UL 746
3.0 mm	PLC 4	--		UL 746
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.75 mm	HB	--		UL 94
1.5 mm	HB	--		UL 94
3.0 mm	HB	--		UL 94
Injection	Dry	Unit		
Drying Temperature	80		°C	
Drying Time	4.0		hr	
Suggested Max Regrind	25		%	
Rear Temperature	280 - 310		°C	
Middle Temperature	280 - 310		°C	
Front Temperature	280 - 310		°C	
Nozzle Temperature	280 - 310		°C	
Processing (Melt) Temp	285 - 305		°C	
Mold Temperature	65 - 95		°C	

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

