

Vydyne® R530H BK0917LT

 Ascend Performance Materials Operations LLC - *Polyamide 66*
General Information
Product Description

Vydyne R530H BK0917LT is a highly laser transparent, 30% glass-filled, heat-stabilized, medium viscosity PA66 based resin designed for injection molding applications. R530H BK0917LT offers standard flow with a black surface finish and maintains the excellent resistance typical of PA66 in chemicals, machine and motor oils, solvents, coolants and gasoline.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	
Features	• Antifreeze Resistant • Chemical Resistant • Fatigue Resistant	• Gasoline Resistant • Heat Stabilized • High Flow	• Laser Weldable • Lubricated • Solvent Resistant
Automotive Specifications	• STELLANTIS MS-DB-41 CPN4018		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66-GF30		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.37	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.80	--	%	
Flow : 73°F, 0.0787 in	0.40	--	%	
Water Absorption (24 hr, 73°F)	1.5	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.9	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.45E+6	1.02E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	28300	18900	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.3	5.2	%	ISO 527-2
Flexural Modulus (73°F)	1.42E+6	957000	psi	ISO 178
Flexural Stress (73°F)	39700	23600	psi	ISO 178
Poisson's Ratio (73°F)	0.40	--		ISO 527-2
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	5.2	5.2	ft·lb/in ²	
-22°F	5.2	5.2	ft·lb/in ²	
73°F	5.7	7.1	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	29	30	ft·lb/in ²	
-22°F	29	34	ft·lb/in ²	
73°F	34	47	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	5.2	5.2	ft·lb/in ²	
-22°F	5.2	5.2	ft·lb/in ²	
73°F	5.7	7.6	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method



Deflection Temperature Under Load (66 psi, Unannealed)	504	500	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	484	473	°F	ISO 75-2/A
Melting Temperature	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	1.2E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	6.1E-5	--	in/in/°F	ISO 11359-2
RTI Elec				UL 746B
0.030 in	284	--	°F	
0.06 in	284	--	°F	
0.12 in	284	--	°F	
RTI Imp				UL 746B
0.030 in	248	--	°F	
0.06 in	248	--	°F	
0.12 in	248	--	°F	
RTI Str				UL 746B
0.030 in	257	--	°F	
0.06 in	284	--	°F	
0.12 in	284	--	°F	

Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	760	510	V/mil	IEC 60243-1
Arc Resistance (0.118 in)	PLC 6	--		ASTM D495
High Amp Arc Ignition (HAI)				UL 746A
0.030 in	PLC 0	--		
0.06 in	PLC 0	--		
0.12 in	PLC 0	--		
High Voltage Arc Tracking Rate (HVTR) (0.118 in)	PLC 1	--		UL 746A
Hot-wire Ignition (HWI)				UL 746A
0.030 in	PLC 4	--		
0.06 in	PLC 3	--		
0.12 in	PLC 4	--		

Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.030 in	HB	--		
0.06 in	HB	--		
0.12 in	HB	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.030 in	1250	--	°F	
0.06 in	1250	--	°F	
0.12 in	1250	--	°F	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.030 in	1290	--	°F	
0.06 in	1290	--	°F	
0.12 in	1290	--	°F	

Processing Information

Injection	Dry Unit
Drying Temperature	176 °F
Drying Time	4.0 hr
Rear Temperature	536 to 590 °F
Middle Temperature	536 to 590 °F
Front Temperature	536 to 590 °F
Nozzle Temperature	536 to 590 °F
Processing (Melt) Temp	545 to 581 °F
Mold Temperature	149 to 203 °F

