Vydyne® R530H BK0201

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

Vydyne R530H BK0201 is general purpose, 30% glass-filled, heat-stabilized, high viscosity PA66 based resin designed for injection molding applications. R530H BK0201 offers standard flow with a black surface finish and maintains the excellent resistance typical of PA66 in chemicals, machine and motor oils, solvents, and gasoline.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	
Features	• Antifreeze Resistant • Chemical Resistant • Fatigue Resistant	• Gasoline Resistant • Good Flow • Heat Stabilized	• Hydrolysis Resistant • Lubricated • Solvent Resistant
Agency Ratings	• ASTM D4066 PA012G30	• ASTM D6779 PA012G30	
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• AISIN TO20141124 - P-PA66-GF30-807 • BMW GS 93016 • CATL MS-00000037 - PA66-GF30-X-I02 • CHERRY Q/SQR.S1-33-2012 CMP.PA66.G6 • DENSO MSR-21-001 • FORD WSS-M4D752-B1 • GM GMW16270P-PA66-GF30 • GM GMW3038P-PA66-GF30H • GM GMW3038P-PA66-GF30J • HYUNDAI MS211-47 Type A2	• LI AUTO INC Q/LIA 5310058 • MAHLE BEHR SD2-181 [1] • MERCEDES BENZ DBL 5406-PV21 [2] • MERCEDES BENZ DBL 5409 • MODINE GM0280-A/B • RENAULT AS26 • STELLANTIS 01994_14_00088 • STELLANTIS FTM64-0046 • STELLANTIS MS-DB-41 CPN4018 • TESLA TM-1006 V3 101130	• TESLA TM-1006 V3 201130 • TESLA TM-1006 V3 301130 • TOYOTA TSM 5603G Color: Class 2B, Rev 5 • VALEO NVB 15007 Color: Class 2B • VALEO NVB 15007-3A • VALEO NVB 15008 Color: Class 3 • VALEO NVB 15009-2 • VOLKSWAGEN PV 1015 • VOLKSWAGEN PV 3936 • VOLKSWAGEN TL 52682
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66-GF30		

Properties [3]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.38	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.90	--	%	
Flow : 73°F, 0.0787 in	0.40	--	%	
Water Absorption (24 hr, 73°F)	1.3	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.9	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.60E+6	1.15E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	29000	19700	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.1	4.0	%	ISO 527-2
Flexural Modulus (73°F)	1.36E+6	928000	psi	ISO 178
Flexural Stress (73°F)	38900	22900	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**

Charpy Notched Impact Strength				ISO 179/1eA
-40°F	4.8	4.6	ft·lb/in²	
-22°F	4.8	4.7	ft·lb/in²	
73°F	5.2	6.7	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	31	33	ft·lb/in²	
-22°F	31	34	ft·lb/in²	
73°F	36	48	ft·lb/in²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	4.8	4.5	ft·lb/in²	
-22°F	4.8	4.5	ft·lb/in²	
73°F	5.2	6.7	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	500	496	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	478	469	°F	ISO 75-2/A
Melting Temperature	504	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	1.1E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	4.5E-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**
Volume Resistivity (0.0394 in)	1.0E+13	--	ohms·cm	IEC 60093
Electric Strength (0.0394 in)	1000	710	V/mil	IEC 60243-1
Arc Resistance (0.118 in)	PLC 6	--		ASTM D495
Comparative Tracking Index (0.118 in)	250 to 399	--	V	IEC 60112
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**
Burning Rate (0.0787 in)	0.0	--	in/min	ISO 3795
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	
	1290	--	°F	

Processing Information

	Dry	Un
erature	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

Notes

[1] (AR.06576) Rev. 7

[2] compliance

[3] Typical properties: these are not to be construed as specifications.