Vydyne® R860 BK02

Polyamide 66

Ascend Performance Materials Operations LLC

Message:

Vydyne R860 BK02 is general-purpose, glass-fiber and mineral-reinforced PA66 resin. Available in black, this product is also lubricated for improved flow and offers superior surface appearance.
Glass fiber and mineral-reinforced Vydyne resins provide higher heat distortion temperature, resistance to creep and better dimensional stability when compared with unreinforced PA66. These products have good chemical resistance to a broad range of chemicals including gasoline, hydraulic fluids and most solvents.
Typical Applications/End Uses:
Vydyne R860 BK02 can be successfully used in a wide range of injection-molding engineering applications. Typical parts include automotive clips, radiator shrouds, fans and mirror brackets; electrical connectors, housings and bobbins; and industrial applications such as gears, bearing shells, covers and housings.

General Information	
Filler / Reinforcement	Glass Fiber Mineral
Additive	Lubricant
Features	Good Mold Release High Rigidity High Strength High Tensile Strength Lubricated Outstanding Surface Finish
Uses	Automotive Under the Hood Gears Housings Lawn and Garden Equipment Metal Replacement Power/Other Tools
Agency Ratings	ASTM D 4066 PA012R40 ASTM D 6779 PA012R40
UL File Number	E70062
Appearance	Black
Forms	Pellets
Processing Method	Injection Molding

Physical	Dry	Conditioned	Unit	Test Method
Density	1.47	--	g/cm^3	ISO 1183
Molding Shrinkage				ISO 294-4

Across Flow : 23°C, 2.00 mm	0.80	--	%	
Flow : 23°C, 2.00 mm	0.25	--	%	
Water Absorption				ISO 62
23°C, 24 hr	0.60	--	%	
Equilibrium, 23°C, 50% RH	2.0	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (23°C)	10000	5900	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	120	90.0	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.5	2.8	%	ISO 527-2
Flexural Modulus (23°C)	9000	4500	MPa	ISO 178
Flexural Stress (23°C)	190	97.0	MPa	ISO 178
Poisson's Ratio	0.40	--		ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179
-30°C	3.8	6.0	kJ/m^2	
23°C	4.4	10	kJ/m^2	
Charpy Unnotched Impact Strength				ISO 179
-30°C	43	60	kJ/m^2	
23°C	48	56	kJ/m^2	
Notched Izod Impact Strength				ISO 180
-30°C	4.6	6.5	kJ/m^2	
23°C	5.6	10	kJ/m^2	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
0.45 MPa, Unannealed	230	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	215	--	°C	ISO 75-2/A
Melting Temperature	255	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	2.4E-4	--	cm/cm/°C	
Transverse : 23 to 55°C, 2.00 mm	6.9E-4	--	cm/cm/°C	
Injection	**Dry**	**Unit**		
Drying Temperature	80.0		°C	
Drying Time	4.0		hr	
Suggested Max Regrind	25		%	
Rear Temperature	280 to 310		°C	
Middle Temperature	280 to 310		°C	
Front Temperature	280 to 310		°C	

Nozzle Temperature	280 to 310	°C
Processing (Melt) Temp	285 to 305	°C
Mold Temperature	65.0 to 95.0	°C

Recommended distributors for this material

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