

Vydyne® R862H BK0676

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

Vydyne R862H BK0676 is a general purpose, glass-fiber, mineral-reinforced, heat stabilized PA66 resin. Available in black, this product is also lubricated for improved flow and offers superior surface appearance. R862H BK0676 can be successfully used in a wide range of injection-molding engineering applications. Typical parts include lower cowl top covers, radiator shrouds, fans and mirror brackets, cylinder head covers.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber/Mineral		
Additive	• Heat Stabilizer	• Lubricant	
Features	• Creep Resistant	• Good Flow	• Lubricated
	• Good Dimensional Stability	• Heat Stabilized	
Agency Ratings	• ASTM D4066 PA114R40 • ASTM D6779 PA084R40		
Automotive Specifications	• HYUNDAI MS211-36 Type C		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66-(GF+MX)		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.47	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.1	--	%	
Flow : 73°F, 0.0787 in	0.40	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	1.5	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.52E+6	1.13E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	21600	14200	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.2	2.2	%	ISO 527-2
Flexural Modulus (73°F)	1.57E+6	812000	psi	ISO 178
Flexural Stress (73°F)	31900	17400	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
-22°F	2.9	2.9	ft·lb/in ²	
73°F	2.9	4.8	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	22	24	ft·lb/in ²	
73°F	23	23	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-22°F	2.9	3.3	ft·lb/in ²	
73°F	3.3	5.2	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	491	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	453	--	°F	ISO 75-2/A
Melting Temperature	500	--	°F	ISO 11357-3



CLTE - Flow (73 to 131°F, 0.0787 in)	1.0E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	3.7E-5	--	in/in/°F	ISO 11359-2

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

Notes

¹ Typical properties: these are not to be construed as specifications.

