

Vydyne® R860 BK02

polyamide 66



Vydyne R860 BK02 is general-purpose, glass-fiber and mineral-reinforced PA66 resin. This product is also lubricated for improved flow and offers superior surface appearance.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Lubricant		
Features	• Creep Resistant • High Strength • Outstanding Surface Finish	• Good Mold Release • High Tensile Strength • Thermal Stability	• High Rigidity • Lubricated
Agency Rating	• ASTM, D4066 PA114R35	• ASTM, D6779 PA084R35	
Automotive Specifications	• Bosch N28_BN05-OX68 • HYUNDAI MS211-47 Type C	• Bosch VDA EMPB	• Chrysler MS-DB-41_CPN 2554
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.47	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	0.8	*	%	
Flow : 23°C, 2.00 mm	0.3	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.6	*	%	
Equilibrium, 23°C, 50% RH	2	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	10000	5900	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	120	90	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 Strength (23°C)	190	97	MPa	ISO 178
Poisson's Ratio (23°C)	0.4		-	ISO 527-2

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Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	4.4	10	kJ/m²	
-30°C	3.8	6	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	48	56	kJ/m²	
-30°C	43	60	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	5.6	10	kJ/m²	
-30°C	4.6	6.5	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	215	-	°C	
0.45 MPa, Unannealed	230	-	°C	
Melting Temperature	255	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	24	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	69	*	E-6/K	

Injection	Value	Unit
Drying Temperature	80	°C
Drying Time	4	h
Rear Temperature	280 - 310	°C
Middle Temperature	280 - 310	°C
Front Temperature	280 - 310	°C
Nozzle temperature	280 - 310	°C
Processing (Melt) Temperature	285 - 305	°C
Mold Temperature	65 - 95	°C

