+135-3858-6433 (GuangDong)
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Vydyne® R535HR BK0790

polyamide 66

Vydyne R535HR BK0790 is a 35% glass filled, heat-stabilized PA66 based resin designed for injection molding applications. It was specifically developed to withstand long term exposure to coolants at temperatures up to 135 C. R535HR BK0790 maintains the excellent resistance typical of PA66 in chemicals, machine and motor oils, solvents and gasoline.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Heat Stabilizer	• Lubricant	
Features	• Chemical Resistant	• Fatigue Resistant	• Gasoline Resistant
	• High Flow	• Laser Markable	• Lubricated
	• Oil Resistant	• Organic Heat Stabilized	• Solvent Resistant
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	dry	cond.	Unit	Test Standard
Density	1.41	-	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.2	*	%	
Flow : 23°C, 2.00 mm	0.6	*	%	
Water Absorption, 23°C, 24 hr	1	*	%	ISO 62

Mechanical	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	11000	8900	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	205	151	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	3.9	5.2	%	ISO 527-2
Flexural Modulus (23°C)	10600	7600	MPa	ISO 178
Flexural Strength (23°C)	292	177	MPa	ISO 178

Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	13	16	kJ/m²	
-30°C	10	11	kJ/m²	
-40°C	10	9.9	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	89	94	kJ/m²	
-30°C	78	80	kJ/m²	
-40°C	77	80	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A

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+23°C	13	14	kJ/m²
-30°C	10	11	kJ/m²
-40°C	10	12	kJ/m²

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	251	244	°C	
0.45 MPa, Unannealed	260	259	°C	
Melting Temperature	260	*	°C	ISO 11357-3

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	35	-	kV/mm	IEC 60243

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