

Vydyne® R533H BK0667

polyamide 66



Vydyne R533H BK0667 is a 33% glass-filled, heat-stabilized PA66 based resin designed for injection molding applications. It was specifically developed to withstand long term exposure to road salts. R533H BK0667 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

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Heat Stabilizer	• Lubricant	
Features	• Chemical Resistant • Heat Stabilized	• Chlorine Resistant • Lubricated	• Crack Resistant
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.38	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	0.9	*	%	
Flow : 23°C, 2.00 mm	0.4	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.8	*	%	
Equilibrium, 23°C, 50% RH	1.3	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	10800	7400	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	190	131	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.8	5	%	ISO 527-2
Flexural Modulus (23°C)	9400	5300	MPa	ISO 178
Flexural Strength (23°C)	270	120	MPa	ISO 178
Poisson's Ratio (23°C)	0.4		-	ISO 527-2

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	11	13	kJ/m ²	
-30°C	9	8	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	73	79	kJ/m ²	
-30°C	64	64	kJ/m ²	

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Notched Izod Impact Strength				ISO 180/1A
+23°C	12	14	kJ/m²	
-30°C	10	10	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	220	-	°C	
0.45 MPa, Unannealed	220	-	°C	
Melting Temperature	262	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	18	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	83	*	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

