

Vydyne® R633H01

copolyamide 66/6



Vydyne R633H01 is 33% glass-fiber reinforced PA66/6 copolymer resin for superior surface appearance. Available in black, this injection-molding grade resin is lubricated for machine feed and mold release.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Heat Stabilizer	• Lubricant	
Features	• Copolymer • Heat Stabilized	• Good Mold Release • High Tensile Strength	• Good Surface Finish • Lubricated
Agency Rating	• ASTM, D4066 PA112G35 • SAE, J1639 PA1816 Z6	• ASTM, D6779 PA082G35	• FED, L-P-410A
UL File Number	• E70062		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.39	-	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	1.3	*	%	
Equilibrium, 23°C, 50% RH	2.3	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	10800	8000	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	184	130	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	4	6	%	ISO 527-2
Flexural Modulus (23°C)	8800	6800	MPa	ISO 178
Flexural Strength (23°C)	255	195	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	12	25	kJ/m ²	
-30°C	11	15	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	51	92	kJ/m ²	

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-30°C	44	91	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	13	22	kJ/m²	
-30°C	12	19	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	230	-	°C	
Melting Temperature	233	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	15	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	100	*	E-6/K	

Electrical	Value	Unit	Test Standard
Arc Resistance (3.00 mm)	5	-	ASTM D 495
Comparative Tracking Index (3.00 mm)	250 - 399	V	IEC 60112
High Amp Arc Ignition (HAI)			UL 746
0.750 mm	PLC 0	-	
1.50 mm	PLC 0	-	
3.00 mm	PLC 0	-	
High Voltage Arc Tracking Rate (HVTR), 3.00 mm	PLC 2	-	UL 746
Hot-wire Ignition (HWI)			UL 746
0.750 mm	PLC 4	-	
1.50 mm	PLC 4	-	
3.00 mm	PLC 3	-	

Flammability	Value	Test Standard
Flammability		UL 94
0.750 mm	HB	
1.50 mm	HB	
3.00 mm	HB	

Injection	Value	Unit
Drying Temperature	80	°C
Drying Time	4	h
Rear Temperature	280 - 310	°C
Middle Temperature	280 - 310	°C

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Front Temperature	280 - 310	°C
Nozzle temperature	280 - 310	°C
Processing (Melt) Temperature	285 - 305	°C
Mold Temperature	65 - 95	°C

