

Vydyne® R550XHT BK0763

polyamide 66



Vydyne R550XHT BK0763 is a 50% glass-filled, heat-stabilized PA66 based resin, specifically designed to withstand long term exposure to elevated temperatures up to 210°C.

General

Regional Availability	• North America • South and Central America	• Europe	• Asia Pacific
Additive	• Heat Stabilizer	• Lubricant	
Features	• Chemical Resistant • Lubricated	• Heat Aging Resistant • Oil Resistant	• Heat Stabilized • Outstanding Surface Finish
Automotive Specifications	• Mercedes-Benz DBL 5409 (compliance)		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.56	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.1	*	%	
Flow : 23°C, 2.00 mm	0.6	*	%	
Water Absorption				ISO 62
23°C, 24 hr	1.1	*	%	
Equilibrium, 23°C, 50% RH	1.4	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	16400	10400	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	227	143	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	3	4.9	%	ISO 527-2
Flexural Modulus (23°C)	15100	9600	MPa	ISO 178
Flexural Strength (23°C)	335	186	MPa	ISO 178
Poisson's Ratio (23°C)	0.34		-	ISO 527-2

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	17	22	kJ/m ²	
-30°C	14	15	kJ/m ²	
-40°C	14	16	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU

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+23°C	97	110	kJ/m²
-30°C	110	98	kJ/m²
-40°C	100	99	kJ/m²
Notched Izod Impact Strength			
+23°C	16	21	kJ/m²
-30°C	15	16	kJ/m²
-40°C	14	15	kJ/m²

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	235	227	°C	
0.45 MPa, Unannealed	254	252	°C	
Melting Temperature	259	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	11	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	65	*	E-6/K	

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	33	26	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

