

Vydyne® R535XHT BK0761

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

Vydyne R535XHT BK0761 is a 35% glass-filled, heat-stabilized PA66 based resin, specifically designed to withstand long term exposure to elevated temperatures up to 210°C.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	
Features	• Chemical Resistant	• Heat Stabilized	• Oil Resistant
	• Heat Aging Resistant	• Lubricated	• Outstanding Surface Finish
Automotive Specifications	• MERCEDES BENZ DBL 5408 ¹	• STELLANTIS 01378_22_02106	• VALEO NVB 15006rev E-4B
	• RENAULT AS24a	• VALEO NVB 15006 Color: Class 4B	
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66-GF35		

Properties ²

Physical	Dry	Conditioned	Unit	Test Method
Density	1.43	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.2	--	%	
Flow : 73°F, 0.0787 in	0.60	--	%	
Water Absorption (24 hr, 73°F)	1.6	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.7	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.60E+6	1.19E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	28000	19400	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.4	4.2	%	ISO 527-2
Flexural Modulus (73°F)	1.55E+6	957000	psi	ISO 178
Flexural Stress (73°F)	41900	22000	psi	ISO 178
Poisson's Ratio (73°F)	0.35	--		ISO 527-2
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	5.2	5.2	ft·lb/in ²	
-22°F	5.2	5.2	ft·lb/in ²	
73°F	6.7	8.6	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	37	38	ft·lb/in ²	
-22°F	39	39	ft·lb/in ²	
73°F	43	48	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	5.2	5.2	ft·lb/in ²	
-22°F	5.2	5.7	ft·lb/in ²	
73°F	6.2	8.1	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method



Deflection Temperature Under Load (66 psi, Unannealed)	489	486	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	446	437	°F	ISO 75-2/A
Melting Temperature	504	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	1.0E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	4.1E-5	--	in/in/°F	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	910	740	V/mil	IEC 60243-1

Processing Information				
Injection			Dry Unit	
Drying Temperature			176 °F	
Drying Time			4.0 hr	
Rear Temperature			536 to 590 °F	
Middle Temperature			536 to 590 °F	
Front Temperature			536 to 590 °F	
Nozzle Temperature			536 to 590 °F	
Processing (Melt) Temp			545 to 581 °F	
Mold Temperature			149 to 203 °F	

Notes				
¹ compliance				
² Typical properties: these are not to be construed as specifications.				

