

# Vydyne® R535H NT651

## polyamide 66



R535H NT651 is 35% glass-filled PA66 resin. Available in natural, it is heat-stabilized with an electrically neutral heat stabilizer. It is designed specially for electrical applications requiring high dielectric strength, low conductivity and corrosion resistance.

Typical Applications/End Uses:  
To come

General				
Material Status	• Commercial: Active			
Availability	• Asia Pacific	• Europe	• North America	
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight			
Additive	• Heat Stabilizer	• Lubricant		
Features	• Antifreeze Resistant • Fatigue Resistant • Gasoline Resistance	• Good Chemical Resistance • Good Flow • Heat Stabilized	• Hydrolysis Resistant • Lubricated • Solvent Resistant	
Uses	• Electrical/Electronic Applications			
Automotive Specifications	• CHRYSLER MS-DB-41 CPN4018 Color: Black • DAEWOO EDS-M-5164-11 • FEDERAL LP410A • FORD WSK-M4D642-A Color: Black • FORD WSK-M4D642-A2 Color: Black	• FORD WSK-M4D752-A Color: Black • GM GMP.PA66.040 Color: Black • GM GMP.PA66.040 Color: Natural • GM GMW3038P-PA66-GF30H Color: Black • GM GMW3038P-PA66-GF30H Color: Natural	• OPEL QK 003013 H Color: Black • OPEL QK 003013 H Color: Natural • OPEL QK 003013 HW Color: Black • TagAZ TAMS-8723-01	
UL File Number	• E70062			
Appearance	• Natural Color			
Forms	• Pellets			
Processing Method	• Injection Molding			
Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 0.0787 in	0.90	--	%	
Flow : 0.0787 in	0.40	--	%	
Water Absorption (73°F, 24 hr)	0.80	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.6	--	%	ISO 62

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.69E+6	1.30E+6	psi	ISO 527-2
Tensile Stress (Break)	30300	22200	psi	ISO 527-2
Tensile Strain (Break)	2.8	4.0	%	ISO 527-2
Flexural Modulus	1.52E+6	1.01E+6	psi	ISO 178
Flexural Stress	43500	27400	psi	ISO 178
Poisson's Ratio	0.35	--		ISO 527
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	5.1	5.5	ft·lb/in <sup>2</sup>	
73°F	5.8	6.8	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	32	36	ft·lb/in <sup>2</sup>	
73°F	38	43	ft·lb/in <sup>2</sup>	
Notched Izod Impact Strength				ISO 180
-22°F	5.2	5.7	ft·lb/in <sup>2</sup>	
73°F	5.7	6.7	ft·lb/in <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	502	--	°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	484	--	°F	
Melting Temperature	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	1.2E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	5.9E-5	--	in/in/°F	ISO 11359-2
Injection	Dry Unit			
Drying Temperature	176 °F			
Drying Time	4.0 hr			
Suggested Max Re grind	25 %			
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

Typical properties: these are not to be construed as specifications.

<sup>1</sup> Typical properties: these are not to be construed as specifications.



### North America

+1 888 927 2363

### Europe

+32 10 608 600

### Asia

+86 21 6340 3300

## Disclaimer of Warranty and Liability

NOTICE: Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, Ascend Performance Materials Operations LLC makes no representations or warranties as to the completeness or accuracy thereof.

Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Ascend Performance Materials Operations LLC be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information or the products to which information refers. Nothing contained herein is to be construed as a recommendation to use any product, equipment or formulation in conflict with any patent, and Ascend Performance Materials Operations LLC makes no representation or warranty, express or implied, that use thereof will not infringe any patent. No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers.