

Vydyne® 65A NT0751

polyamide 66



Vydyne 65A NT0751 is a medium-viscosity, heat-stabilized PA66 resin suitable for injection-molding, extrusion and compounding applications. It is available in natural color only. Vydyne 65A

NT0751 resin offers high strength, rigidity and toughness over a broad range of demanding applications, and good fluid resistance to a wide variety of chemicals, solvents and oils.

General				
Material Status	• Commercial: Active			
Availability	• Asia Pacific	• Europe	• North America	
Features	• Chemical Resistant • General Purpose • Good Toughness	• Heat Stabilized • High Rigidity • High Strength	• Medium Viscosity • Oil Resistant • Solvent Resistant	
Uses	• Industrial Applications • Monofilaments	• Profiles • Rods	• Sheet • Tubing	
Agency Ratings	• ASTM D4066 PA0123 • ASTM D6779 PA0123 • EC 1935/2004	• EU 10/2011 • EU 2023/2006 • FDA 21 CFR 177.1500	• FED L-P-410A • MIL M-20693B	
RoHS Compliance	• RoHS Compliant			
Appearance	• Natural Color			
Forms	• Pellets			
Processing Method	• Extrusion			

Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.8	--	%	
Flow : 23°C, 2.00 mm	2.0	--	%	
Water Absorption				ISO 62
Saturation, 23°C	8.5	--	%	
Equilibrium, 23°C, 50% RH	2.5	--	%	

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	3100	1800	MPa	ISO 527-2
Tensile Stress				ISO 527-2
Yield, 23°C	85.0	50.0	MPa	
Break, 23°C	55.0	50.0	MPa	
Tensile Strain (Yield, 23°C)	5.5	21	%	ISO 527-2
Nominal Tensile Strain at Break (23°C)	> 25	> 200	%	ISO 527-2
Flexural Modulus (23°C)	2800	700	MPa	ISO 178
Flexural Stress (23°C)	75.0	20.0	MPa	ISO 178
Poisson's Ratio	0.40	--		ISO 527-2

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	6.0	7.0	kJ/m ²	
23°C	5.0	35	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	No Break	No Break		
23°C	No Break	No Break		
Notched Izod Impact Strength				ISO 180
-30°C	5.0	7.0	kJ/m ²	
23°C	6.0	35	kJ/m ²	

Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	200	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	65.0	--	°C	ISO 75-2/A
Melting Temperature	260	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	1.0E-4	--	cm/cm/°C	
Transverse : 23 to 55°C, 2.00 mm	1.0E-4	--	cm/cm/°C	

Extrusion	Dry Unit
Cylinder Zone 1 Temp.	250 to 295 °C
Cylinder Zone 2 Temp.	250 to 295 °C
Cylinder Zone 3 Temp.	250 to 295 °C
Cylinder Zone 4 Temp.	250 to 295 °C
Cylinder Zone 5 Temp.	250 to 295 °C
Melt Temperature	270 to 295 °C
Die Temperature	270 to 295 °C

Extrusion Notes

Recommended Extrusion Conditions:

Melt Point: 260°C

Melt Pressure: 3 to 17 MPa

Blow Film Bath Temperature: 20°C to 80°C

Chill Roll Temperature (Cast Film): 20°C to 80°C

Screw Design: General Purpose or Barrier

Notes

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

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



North America

+1 888 927 2363

Europe

+32 10 608 600

Asia

+86 21 2315 0888

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 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 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 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.