



Vydyne 66R NT0750 is a high-viscosity, heat-stabilized PA66 resin suitable for injection-molding and extrusion applications. It is available in natural color only. Vydyne 66R NT0750 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	
Additive	Heat Stabilizer			
Features	<ul><li>Chemical Resistant</li><li>Gasoline Resistant</li><li>General Purpose</li><li>Good Toughness</li></ul>	<ul><li>Heat Stabilized</li><li>High Rigidity</li><li>High Strength</li><li>High Viscosity</li></ul>	<ul><li>Kosher Approved</li><li>Oil Resistant</li><li>Slip</li><li>Solvent Resistant</li></ul>	
Uses	<ul><li>Film</li><li>Industrial Applications</li><li>Monofilaments</li></ul>	<ul><li> Profiles</li><li> Rods</li><li> Sheet</li></ul>	• Tubing	
Agency Ratings	<ul><li>ASTM D4066 PA0124</li><li>ASTM D6779 PA0124</li><li>EC 1935/2004</li></ul>	<ul><li>EU 10/2011</li><li>EU 2023/2006</li><li>FDA 21 CFR 177.1500</li></ul>	• FED L-P-410A • MIL M-20693B	
RoHS Compliance	RoHS Compliant			
Appearance	<ul> <li>Natural Color</li> </ul>			
Forms	• Pellets			
Processing Method	<ul><li>Extrusion</li></ul>			
Physical	Dry	Conditioned	Unit	Test Method
Density	1.14		g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow: 23°C, 2.00 mm	2.0		%	
Flow: 23°C, 2.00 mm	2.1		%	
Water Absorption				ISO 62
Saturation, 23°C	8.5		%	
Equilibrium, 23°C, 50% RH	2.5		%	

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# Vydyne® 66R NT0750 polyamide 66



Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	2800	1800	MPa	ISO 527-2
Tensile Stress				ISO 527-2
Yield, 23°C	85.0	55.0	MPa	
Break, 23°C	55.0	70.0	MPa	
Tensile Strain (Yield, 23°C)	5.0	25	%	ISO 527-2
Nominal Tensile Strain at Break (23°C)	> 25	> 130	%	ISO 527-2
Flexural Modulus (23°C)	3100	900	MPa	ISO 178
Flexural Strength (23°C)	90.0	30.0	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	6.0	kJ/m²	
23°C	6.0	25	kJ/m²	
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	6.0	6.0	kJ/m²	
23°C	6.0	25	kJ/m²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	195		°C	ISO 75-2/B
1.8 MPa, Unannealed	70.0		°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		
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#### **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.

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North America +1 888 927 2363 **Europe** +32 10 608 600

Asia

+86 21 2315 0888

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