



Vydyne® 67R NT0753

Ascend Performance Materials Operations LLC - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Vydyne 67R NT0753 is a high-viscosity, heat-stabilized PA66 resin suitable for injection-molding and extrusion applications. It is available in natural color only. Vydyne 67R NT0753 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	• Chemical Resistant • Gasoline Resistant • General Purpose • Good Toughness	• Heat Stabilized • High Melt Stability • High Rigidity • High Strength	• High Viscosity • Oil Resistant • Solvent Resistant
Uses	• Automotive Applications • Film • Industrial Applications	• Monofilaments • Profiles • Rods	• Sheet • Tubing
Agency Ratings	• ASTM D4066 PA0124 • ASTM D6779 PA0124	• EC 1935/2004 • EU 10/2011	• EU 2023/2006 • FDA 21 CFR 177.1500
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• HYUNDAI MS211-40		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion		

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	2.1	--	%	
Flow : 73°F, 0.0787 in	2.2	--	%	
Water Absorption				ISO 62
Saturation, 73°F	8.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	2.5	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	413000	276000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	12300	7980	psi	ISO 527-2
Tensile Stress (Break, 73°F)	7980	10200	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	5.0	20	%	ISO 527-2
Nominal Tensile Strain at Break				ISO 527-2
73°F	40	250	%	
Flexural Modulus (73°F)	435000	109000	psi	ISO 178
Flexural Stress (73°F)	11600	2900	psi	ISO 178
Poisson's Ratio	0.40	--		ISO 527-2

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Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	2.9	2.9	ft·lb/in ²	
73°F	3.3	14	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	No Break	No Break		
73°F	No Break	No Break		
Notched Izod Impact Strength				ISO 180
-22°F	2.9	2.9	ft·lb/in ²	
73°F	3.3	14	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	392	--	°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	149	--	°F	
Melting Temperature	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	5.6E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	5.6E-5	--	in/in/°F	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity (0.0295 in)	1.0E+14	--	ohms·cm	IEC 60093

Processing Information

Injection	Dry	Unit
Drying Temperature	140 to 167	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.050 to 0.10	%
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
Extrusion	Dry	Unit
Cylinder Zone 1 Temp.	536 to 563	°F
Cylinder Zone 2 Temp.	536 to 563	°F
Cylinder Zone 3 Temp.	536 to 563	°F
Cylinder Zone 4 Temp.	536 to 563	°F
Cylinder Zone 5 Temp.	536 to 563	°F
Melt Temperature	518 to 563	°F
Die Temperature	518 to 563	°F

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Extrusion Notes

Recommended Extrusion and Molding Conditions:

Melt Point: 260°C

Melt Pressure: 3 to 17 MPa

Mold Temperature: 120°F

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

We recommend drying at 170°F for 4 hours at -10 to -15°C (5 to 15°F) dew point.

Notes

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