

Vydyne® 63H NT0752

 Ascend Performance Materials Operations LLC - *Polyamide 66*
General Information
Product Description

Vydyne 63H NT0752 is a medium-viscosity, heat stabilized PA66 resin suitable for injection-molding, extrusion and compounding applications. It is available in natural color only. 63H NT0752 resin offers high strength, rigidity, and toughness over a broad range of demanding applications, good fluid resistance to a wide variety of chemicals, solvents and oils, and heat stability to ensure property longevity when the material is subjected to higher temperatures.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Heat Stabilizer		
Features	• Chemical Resistant • General Purpose • Good Toughness • Heat Stabilized	• High Melt Strength • High Rigidity • High Strength • Medium Viscosity	• Oil Resistant • Solvent Resistant
Agency Ratings	• ASTM D4066 PA0122 • ASTM D6779 PA0122	• EC 1935/2004 • EU 10/2011	• EU 2023/2006
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion		
Resin ID	• PA66		

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	1.9	--	%	
Flow : 73°F, 0.0787 in	1.9	--	%	
Water Absorption (Saturation, 73°F)	8.5	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.5	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	464000	247000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	12300	7980	psi	ISO 527-2
Tensile Stress (Break, 73°F)	7980	9430	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	5.0	20	%	ISO 527-2
Tensile Strain (Break, 73°F)	25	200	%	ISO 527-2
Flexural Modulus (73°F)	363000	102000	psi	ISO 178
Flexural Stress (73°F)	10200	2900	psi	ISO 178
Poisson's Ratio (73°F)	0.40	--		ISO 527-2
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	2.4	4.3	ft·lb/in ²	
73°F	2.9	12	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 180/1A
-22°F	2.4	4.3	ft·lb/in ²	
73°F	2.9	12	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method



Deflection Temperature Under Load (66 psi, Unannealed)	374	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	154	--	°F	ISO 75-2/A
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

Processing Information

Extrusion	Dry Unit
Cylinder Zone 1 Temp.	482 to 563 °F
Cylinder Zone 2 Temp.	482 to 563 °F
Cylinder Zone 3 Temp.	482 to 563 °F
Cylinder Zone 4 Temp.	482 to 563 °F
Cylinder Zone 5 Temp.	482 to 563 °F
Melt Temperature	518 to 563 °F
Die Temperature	518 to 563 °F

