Vydyne® 65A NT0751

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

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. 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
Additive	• Heat Stabilizer		
Features	• Chemical Resistant • General Purpose • Good Toughness	• Heat Stabilized • High Rigidity • High Strength	• Medium Viscosity • Oil Resistant • Solvent Resistant
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
Automotive Specifications	• STELLANTIS 01378_20_03295		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion		
Resin ID	• PA66		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.8	--	%	
Flow : 73°F, 0.0787 in	2.0	--	%	
Water Absorption (Saturation, 73°F)	8.5	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.3	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	450000	261000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	12300	7250	psi	ISO 527-2
Tensile Stress (Break, 73°F)	7980	7250	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	5.5	21	%	ISO 527-2
Tensile Strain (Break, 73°F)	25	200	%	ISO 527-2
Flexural Modulus (73°F)	406000	102000	psi	ISO 178
Flexural Stress (73°F)	10900	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	2.9	3.3	ft·lb/in²	
73°F	2.4	17	ft·lb/in²	
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	3.3	ft·lb/in²	
73°F	2.9	17	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**

Deflection Temperature Under Load (66 psi, Unannealed)	392	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	149	--	°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

Notes

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