Vydyne® 66H NT0754

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

Vydyne 66H NT0754 is a high-viscosity, heat-stabilized PA66 resin with ideal shear-thinning behavior for injection-molding and extrusion applications. It is available in natural color only. 66H NT0754 offers a combination of high strength, rigidity, toughness, abrasion resistance, chemical resistance, and thermal stability making it appealing for a broad range of applications.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Chemical Resistant • Gasoline Resistant • General Purpose • Good Toughness	• High Melt Stability • High Rigidity • High Strength • High Viscosity	• Oil Resistant • Solvent Resistant
Agency Ratings	• ASTM D4066 • ASTM D6779	• EC 1935/2004 • EU 10/2011	• EU 2023/2006 • FDA 21 CFR 177.1500
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• RENAULT UB19b	• STELLANTIS MS-DB-41 CPN2473	
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	2.4	--	%	
Flow : 73°F, 0.0787 in	2.4	--	%	
Water Absorption (24 hr, 73°F)	1.8	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.4	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	421000	203000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	12000	7830	psi	ISO 527-2
Tensile Strain (Break, 73°F)	71	97	%	ISO 527-2
Flexural Modulus (73°F)	435000	160000	psi	ISO 178
Flexural Stress (73°F)	13100	4350	psi	ISO 178
Poisson's Ratio (73°F)	0.38	--		ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	2.1	2.3	ft·lb/in²	
-22°F	2.0	2.7	ft·lb/in²	
73°F	2.4	5.7	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	No Break	No Break		
-22°F	No Break	No Break		
73°F	No Break	No Break		
Notched Izod Impact Strength				ISO 180/1A
-40°F	2.1	2.4	ft·lb/in²	
-22°F	2.0	3.0	ft·lb/in²	

73°F	2.4	3.7	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	370	363	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	153	201	°F	ISO 75-2/A
Melting Temperature	504	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	3.9E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	4.2E-5	--	in/in/°F	ISO 11359-2
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Volume Resistivity (0.0394 in)	2.7E+15	1.4E+11	ohms·cm	IEC 60093

Processing Information

Injection	**Dry**	**Unit**
Drying Temperature	140 to 167	°F
Drying Time	4.0	hr
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.	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.