

Vydyne® R433H NT0773

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

Vydyne R433H NT0773 is general-purpose, heat-stabilized, impact-modified, 33% glass-fiber reinforced PA66 resin. It is specifically designed to maximize toughness, while retaining physical properties. This product is also lubricated for improved flow and offers superior surface appearance.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Additive	• Heat Stabilizer • Impact Modifier • Lubricant
Features	• Balanced Stiffness/Toughness • Good Heat Resistance • Impact Modified • Chemical Resistant • Good Rigidity • Lubricated • Creep Resistant • Good Tensile Strength • Oil Resistant • Gasoline Resistant • Good Toughness • Solvent Resistant • Good Dimensional Stability • Heat Stabilized
Agency Ratings	• ASTM D4066 • ASTM D6779
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA66-I-GF33

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.35	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.0	--	%	
Flow : 73°F, 0.0787 in	0.20	--	%	
Water Absorption (24 hr, 73°F)	1.0	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.3	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.36E+6	1.00E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	22500	16400	psi	ISO 527-2
Tensile Strain (Break, 73°F)	4.0	6.4	%	ISO 527-2
Flexural Modulus (73°F)	1.25E+6	827000	psi	ISO 178
Flexural Stress (73°F)	31900	18600	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	8.6	8.1	ft·lb/in ²	
-22°F	9.0	8.6	ft·lb/in ²	
73°F	12	15	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	52	48	ft·lb/in ²	
-22°F	52	48	ft·lb/in ²	
73°F	47	52	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	8.6	8.6	ft·lb/in ²	
-22°F	8.6	9.0	ft·lb/in ²	
73°F	12	14	ft·lb/in ²	



Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	498	496	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	475	468	°F	ISO 75-2/A
Melting Temperature	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	8.9E-6	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	6.1E-6	--	in/in/°F	ISO 11359-2

Processing Information

Injection	Dry	Unit
Drying Temperature	176	°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

Notes

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

