

HiDura™ MED AG33 NT0862

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

HiDura MED AG33 NT is an injection moldable glass fiber reinforced PA66 resin designed for healthcare applications. It is characterized by excellent strength & stiffness for structural needs. The product is compliant to ISO 10993-5 and ISO 10993-10. It is very easy to color and exhibits good property retention after most sterilization methods.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Additive	• Lubricant • Mold Release
Features	<ul style="list-style-type: none"> • Bromine Free • Chemical Resistant • Corrosion Resistant • Creep Resistant • Fatigue Resistant • Good Colorability • Good Dimensional Stability • Good Flow • Good Impact Resistance • Good Mold Release • Good Processability • Good Stiffness • Halogen Free • High Rigidity • High Strength • High Tensile Strength • Homopolymer • Hydrolysis Resistant • Lubricated • Solvent Resistant
Agency Ratings	• BSE/TSE Compliant
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA66-GF33

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.40	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.90	--	%	
Flow : 73°F, 0.0787 in	0.40	--	%	
Water Absorption (24 hr, 73°F)	0.80	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.7	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.54E+6	1.15E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	29700	21000	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.0	5.0	%	ISO 527-2
Flexural Modulus (73°F)	1.48E+6	943000	psi	ISO 178
Flexural Stress (73°F)	42100	29000	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
-40°F	5.2	5.2	ft·lb/in ²	
-22°F	5.2	5.2	ft·lb/in ²	
73°F	6.2	8.1	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	33	36	ft·lb/in ²	
-22°F	34	37	ft·lb/in ²	
73°F	41	48	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	4.8	5.2	ft·lb/in ²	
-22°F	4.8	5.7	ft·lb/in ²	



73°F	5.7	7.6	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	500	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	482	--	°F	ISO 75-2/A
Melting Temperature	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	1.2E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	5.9E-5	--	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.

