HiDura™ MED AG33 NT0862

polyamide 66

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

Additive	• Lubricant	• Release agent	
Features	• Bromine Free	• Chemical Resistant	• Corrosion Resistant
	• Creep Resistant	• Fatigue Resistant	• Good Colorability
	• Good Dimensional Stability	• Good Flow	• Good Impact Strength
	• Good Mold Release	• Good Processability	• Good Stiffness
	• Halogen Content, None	• High Rigidity	• High Strength
	• High Tensile Strength	• Hydrolysis Resistant	• Homopolymer
	• Lubricated	• Solvent Resistant	
Agency Rating	• BSE/TSE Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	dry	cond.	Unit	Test Standard
Density	1.40	-	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	0.9	*	%	
Flow : 23°C, 2.00 mm	0.4	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.8	*	%	
Equilibrium, 23°C, 50% RH	1.7	*	%	

Mechanical	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	10600	7900	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	205	145	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	3	5	%	ISO 527-2
Flexural Modulus (23°C)	10200	6500	MPa	ISO 178
Flexural Strength (23°C)	290	200	MPa	ISO 178
Poisson's Ratio (23°C)	0.4			ISO 527-2

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Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	13	17	kJ/m²	
-30°C	11	11	kJ/m²	
-40°C	11	11	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	86	100	kJ/m²	
-30°C	71	77	kJ/m²	
-40°C	69	75	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	12	16	kJ/m²	
-30°C	10	12	kJ/m²	
-40°C	10	11	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	250	-	°C	
0.45 MPa, Unannealed	260	-	°C	
Melting Temperature	260	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	21	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	106	*	E-6/K	

Injection	Value	Unit
Drying Temperature	80	°C
Drying Time	4	h
Rear Temperature	280 - 310	°C
Middle Temperature	280 - 310	°C
Front Temperature	280 - 310	°C
Nozzle temperature	280 - 310	°C
Processing (Melt) Temperature	285 - 305	°C
Mold Temperature	65 - 95	°C

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CAUTION: Do not use Ascend Performance Materials Operations MED grades in medical applications involving implantation in the human body or contact with internal body fluids or tissues for extended periods of time.