HiDura™ MED AI1 NT0861





HiDura MED Al1 NT0861 is a high impact-modified PA66 resin designed for healthcare applications. The product provides all the processing and performance advantages of PA66 with excellent impact strength even at low temperatures and can be easily colored. This product offers a combination of engineering properties characterized by excellent toughness and flexibility; high melt point; and resistance to many chemicals including disinfectants. The product is compliant to ISO 10993-5 and ISO 10993-10. It exhibits good property retention after most sterilization methods.

Regional Availability	 North America 	• Europe	 Asia Pacific
Additive	• Lubricant	Release agent	
Features	Acoustical Barrier Properties	Bromine Free	Chemical Resistant
	 Corrosion Resistant 	 Crack Resistant 	 Ductile
	 Good Colorability 	 Good Impact Strength 	 Good Processability
	 Good Surface Finish 	 Halogen Content, None 	 High Toughness
	Homopolymer	 Low Temperature Impact Resistance 	 Low Temperature Toughness
	Lubricated	Solvent Resistant	 Ultra High Impact Resistance
Agency Rating	BSE/TSE Compliant		
Appearance	Natural Color		
Forms	• Pellets		
Processing Method	Injection Molding	Profile Extrusion	

Physical	dry	cond.	Unit	Test Standard
Density	1.08	-	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow: 23°C, 2.00 mm	1.6	*	%	
Flow: 23°C, 2.00 mm	1.8	*	%	
Water Absorption				ISO 62
23°C, 24 hr	1	*	%	
Equilibrium, 23°C, 50% RH	2.1	*	%	

Mechanical	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	2200	1400	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	50	35	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	43	39	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	50	175	%	ISO 527-2
Flexural Modulus (23°C)	1800	500	MPa	ISO 178
Flexural Strength (23°C)	53	17	MPa	ISO 178

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Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	76	110	kJ/m²	
-30°C	35	25	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	N	N	kJ/m²	
-30°C	N	N	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	78	88	kJ/m²	
-30°C	40	29	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	58	-	°C	
0.45 MPa, Unannealed	145	-	°C	
Melting Temperature	260	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow: 23 to 55°C, 2.00 mm	168	*	E-6/K	
Transverse: 23 to 55°C, 2.00 mm	149	*	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	



North America +1 888 927 2363 **Europe** +32 10 608 600

Asia

+86 21 2315 0888

Disclaimer

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HiDuraTM MED AI1 NT0861 polyamide 66



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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.

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Last Updated: Sep, 2022