HiDura™ MED AI1 NT0861

polyamide 66

HiDura MED AI1 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.

General

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

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Disclaimer

implied, of merchantability fitness for a particular purpose or of any other nature are made hereunder with respect to information or product to which information refers.

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.