HiDura™ MED AP NT0860

polyamide 66

HiDura MED AP NT0860 is an unfilled resin designed for healthcare applications. It is a lubricated PA66 resin with fast cycle times even in large cavitation tools for higher productivity and can easily be colored. This product offers a combination of engineering properties characterized by high strength; rigidity; good toughness; high melt point; good surface lubricity; abrasion resistance; 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

Regional Availability	• North America	• Europe	• Asia Pacific
	• South and Central America	• Near East/Africa	
Additive	• Lubricant	• Release agent	
Features	• Abrasion Resistance	• Balanced Stiffness/Toughness	• Bromine Free
	• Chemical Resistant	• Corrosion Resistant	• Ductile
	• Excellent Processability	• Fast Molding Cycle	• Good Colorability
	• Good Electrical Properties	• Good Flow	• Good Mold Release
	• Good Rigidity	• Good Stiffness	• Good Surface Finish
	• Halogen Content, None	• High Crystallinity	• High Toughness
	• Homopolymer	• Ignition Resistant	• Lubricated
	• Medium Viscosity	• Nucleated	• Solvent Resistant
Agency Rating	• BSE/TSE Compliant	• ISO, 1043 PA66	
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding	• Profile Extrusion	

Physical	dry	cond.	Unit	Test Standard
Density	1.14	-	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	2.0	*	%	
Flow : 23°C, 2.00 mm	2.0	*	%	
Water Absorption				ISO 62
23°C, 24 hr	1.2	*	%	
Equilibrium, 23°C, 50% RH	2.4	*	%	

Mechanical	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	2900	1900	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	89	60	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	81	49	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	4.8	20	%	ISO 527-2
Tensile Strain (Break, 23°C)	29	76	%	ISO 527-2

Flexural Modulus (23°C)	3300	1100	MPa	ISO 178
Flexural Strength (23°C)	105	30	MPa	ISO 178
Poisson's Ratio (23°C)	0.4		-	ISO 527-2

Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	6	23	kJ/m²	
-30°C	5	7	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	6	23	kJ/m²	
-30°C	5	7	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	72	-	°C	
0.45 MPa, Unannealed	210	-	°C	
Melting Temperature	260	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	100	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	100	*	E-6/K	

Railway Application	dry	cond.	Unit	Test Standard
Oxygen index	26	-	%	EN ISO 4589-2

Injection	Value	Unit
Drying Temperature	70	°C
Drying Time	1 - 3	h
Rear Temperature	260 - 280	°C
Middle Temperature	270 - 285	°C
Front Temperature	280 - 290	°C
Nozzle temperature	280 - 300	°C
Processing (Melt) Temperature	285 - 300	°C
Mold Temperature	65 - 95	°C

HiDura™ MED AP NT0860

polyamide 66

North America
+1 888 927 2363

Europe
+32 10 608 600

Asia
+86 21 2315 0888

Disclaimer

NOTICE: Although the information and recommendations set forth herein (hereinafter " information") are presented in good faith and believed to be correct as of the date hereof, Ascend Performance Materials Operations makes no representation or warranties as to the completeness of accuracy thereof.

Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purpose prior to use. In no event will Ascend Performance Materials Operations be responsible for damages of any nature whatsoever resulting in the use of or reliance upon information or the products to which information refers. Nothing contained herein is to be construed as a recommendation to use any product, equipment or formulation in conflict with any patent, and Ascend Performance Materials Operations makes no representation or warranty, express or implied, that use thereof will not infringe any patent. No representation or warranties, either express or 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.