



## LATAMID 12 AM H2 K/15

Compound based on Polyamide 12 (PA 12). 3D printing version. Improved thermal stabilization. Carbon fibers. PFAS-free product.

The products mentioned herein are not suitable for applications in contact with foodstuffs or for potable water transportation, or for toy manufacturing.

The products mentioned herein are not suitable for applications in the pharmaceutical, medical or dental sector.

PHYSICAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
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<b>Density</b>		
injection molding	ISO 1183	1.08 g/cm <sup>3</sup>
<b>Linear shrinkage at moulding</b>		
Longitudinal (0.078in/8,700psi)	ISO 294-4	0.15 ÷ 0.30 %
Transversal (0.078in/8,700psi)	ISO 294-4	0.40 ÷ 0.50 %
<b>Dimensional stability</b>	---	76
<b>Moisture absorption</b>		
saturation, in air	ISO 62-4	0.60 %

MECHANICAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
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<b>CHARPY impact strength</b>		
Unnotched, at 23°F, injection molding	ISO 179-1eU	22.5 ft.lb/in <sup>2</sup>
Notched, at 23°F, injection molding	ISO 179-1eA	7.0 ft.lb/in <sup>2</sup>

MECHANICAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
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<b>Tensile elongation</b>		
At yield (0.196 in/min), 23°F, injection molding	ISO 527	1.3 %
At break (0.196 in/min), 23°F, injection molding	ISO 527	4.8 %
<b>Tensile strength</b>		
At yield (0.196 in/min), 23°F, injection molding	ISO 527	11250 psi
At break (0.196 in/min), 23°F, injection molding	ISO 527	16500 psi
<b>Elastic modulus</b>		
Tensile (0.04 in/min), 23°F, injection molding	ISO 527	1230 kpsi

THERMAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
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<b>Coefficient of linear thermal expansion (CLTE)</b>		
30°F to 100°F (longitudinal)	ISO 11359	15 × 10 <sup>-6</sup> K <sup>-1</sup>
30°F to 100°F (transversal)	ISO 11359	65 × 10 <sup>-6</sup> K <sup>-1</sup>
<b>VICAT - Softening point</b>		
11 lb (heating rate 250°F/h), injection molding	ISO 306	338 °F
<b>HDT - Heat Deflection Temperature</b>		
66 psi, injection molding	ISO 75	338 °F
264 psi, injection molding	ISO 75	320 °F

ELECTRICAL PROPERTIES	STANDARD	VALUE MEASURE UNITS
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<b>Electrical resistivity</b>		
surface, dry	ASTM D 257 / ASTM D4496	1E3 ohm
<b>Dielectric strength (short period)</b>		
0.078 in. thickness, 73°F, dry	ASTM D 149	102 kV/mm



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### FILAMENT EXTRUSION PARAMETERS

Material drying (at least 4h @ ...)

### VALUE MEASURE UNITS

175 °F

Suggested temperature range of filament production

410 - 445 °F

### 3D PRINTING SUGGESTED CONDITIONS

### VALUE MEASURE UNITS

Filament drying conditions

195 °F

Extruder temperature

480 - 500 °F

Chamber conditioning

OFF

Nozzle type

Steel

### MOLDED SPECIMEN CONDITIONS

### VALUE MEASURE UNITS

### APPROVALS

Please, check our site or contact LATI for details.

### CONTACTS

LATI Industria Termoplastici S.p.A.