



## LATAMID 12 AM H2 K/15

Compound based on Polyamide 12 (PA 12). 3D printing version. Improved thermal stabilisation. Carbon fibres. 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
<b>Density</b>		
injection moulding	ISO 1183	1.08 g/cm <sup>3</sup>
<b>Linear shrinkage at moulding</b>		
Longitudinal (2.0mm/60MPa)	ISO 294-4	0.15 ÷ 0.30 %
Transversal (2.0mm/60MPa)	ISO 294-4	0.40 ÷ 0.50 %
<b>Dimensional stability</b>	---	76
<b>Moisture absorption</b>		
saturation, in air	ISO 62-4	0.60 %
<b>MECHANICAL PROPERTIES</b>	<b>STANDARD</b>	<b>VALUE MEASURE UNITS</b>
<b>CHARPY impact strength</b>		
Unnotched, at 23°C, injection moulding	ISO 179-1eU	50.0 kJ/m <sup>2</sup>
Notched, at 23°C, injection moulding	ISO 179-1eA	15.0 kJ/m <sup>2</sup>
<b>MECHANICAL PROPERTIES</b>	<b>STANDARD</b>	<b>VALUE MEASURE UNITS</b>
<b>Tensile elongation</b>		
At yield (5 mm/min), 23°C, injection moulding	ISO 527	1.3 %
At break (5 mm/min), 23°C, injection moulding	ISO 527	4.8 %
<b>Tensile strength</b>		
At yield (5 mm/min), 23°C, injection moulding	ISO 527	80 MPa
At break (5 mm/min), 23°C, injection moulding	ISO 527	115 MPa
<b>Elastic modulus</b>		
Tensile (1 mm/min), 23°C, injection moulding	ISO 527	8500 MPa
<b>THERMAL PROPERTIES</b>	<b>STANDARD</b>	<b>VALUE MEASURE UNITS</b>
<b>Coefficient of linear thermal expansion (CLTE)</b>		
30°C to 100°C (longitudinal)	ISO 11359	15 × 10 <sup>-6</sup> K <sup>-1</sup>
30°C to 100°C (transversal)	ISO 11359	65 × 10 <sup>-6</sup> K <sup>-1</sup>
<b>VICAT - Softening point</b>		
50 N (heating rate 120°C/h), injection moulding	ISO 306	170 °C
<b>HDT - Heat Deflection Temperature</b>		
0.45 MPa, injection moulding	ISO 75	170 °C
1.81 MPa, injection moulding	ISO 75	160 °C
<b>ELECTRICAL PROPERTIES</b>	<b>STANDARD</b>	<b>VALUE MEASURE UNITS</b>
<b>Electrical resistivity</b>		
surface, dry	ASTM D 257 / ASTM D4496	1E3 ohm
<b>Dielectric strength (short period)</b>		
2 mm thickness, 23°C, dry	ASTM D 149	4 kV/mm



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### FILAMENT EXTRUSION PARAMETERS

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

### VALUE MEASURE UNITS

80 °C

Suggested temperature range of filament production

210 - 230 °C

### 3D PRINTING SUGGESTED CONDITIONS

### VALUE MEASURE UNITS

Filament drying conditions

90 °C

Extruder temperature

250 - 260 °C

Chamber conditioning

OFF

Nozzle type

Steel

### MOULDED SPECIMEN CONDITIONS

### VALUE MEASURE UNITS

### APPROVALS

Please, check our site or contact LATI for details.

### CONTACTS

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