

LATI LATAMID 66 S/50 50% Glass Sphere Reinforced Nylon 66 (discontinued **)

Categories: [Polymer](#); [Thermoplastic](#); [Nylon \(Polyamide PA\)](#); [Nylon 66 \(PA66\)](#); [Nylon 66, Glass Bead Filled](#)

Material Description: Latamid 66 is a family of Nylon 66 with various reinforcements and corresponding properties. They are distinguished by their excellent flowability, moldability and good mechanical and electrical properties. Glossy finish is achievable in a wide range of colors. Pieces made of Latamid 66 can be painted without any particular problem. Nylon 66 is a hygroscopic resin but to a lesser extent than Nylon 6. This may be an advantage as it improves flexibility and impact resistance of the parts, but in other cases, water absorption is likely to cause dimensional changes that are not always compatible with tight tolerance requirements. Furthermore, variation of mechanical characteristics resulting from water absorption will not always be acceptable.

Specific Notes for this Material: 50% glass spheres; excellent flowability; excellent dimensional stability.

Disclaimer from LATI: This document contains information based on average values as obtained from the results of laboratory tests and observations made on LATI materials. Tested materials were injection molded, used in their natural color, and conditioned in compliance with Standard ASTM D 618, procedure A. These values refer to LATI's best technical and scientific knowledge at the moment of testing and cannot be used as a basis for the development of applications. For a better assessment of the materials, you are kindly requested to contact LATI's technical or commercial offices, which are at your disposal and will supply detailed information on the most suitable characteristics for their intended use. With reference to DPR n.224 dated May 24, 1988, issued in accordance with EC Guide-lines 85/374, LATI Industria Termoplastici S.p.a. declines all responsibility arising from an improper use of the products described in this document.

All data provided by LATI.

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.57 g/cc	0.0567 lb/in ³	ISO 1183
Water Absorption	0.50 %	0.50 %	at 23°C; ISO 62
Linear Mold Shrinkage	0.0080 cm/cm	0.0080 in/in	LATI
Linear Mold Shrinkage, Transverse	0.0080 cm/cm	0.0080 in/in	LATI

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	92	92	ASTM D785
Tensile Strength, Ultimate	85.0 MPa	12300 psi	ISO 527
<input type="checkbox"/>	31.0 MPa	4500 psi	ISO 527
	@Temperature 120 °C	@Temperature 248 °F	
	38.0 MPa	5510 psi	ISO 527
	@Temperature 90.0 °C	@Temperature 194 °F	
	50.0 MPa	7250 psi	ISO 527
	@Temperature 60.0 °C	@Temperature 140 °F	
Flexural Modulus	5.70 GPa	827 ksi	ASTM D790
<input type="checkbox"/>	1.25 GPa	181 ksi	ASTM D790
	@Temperature 120 °C	@Temperature 248 °F	
	1.60 GPa	232 ksi	ASTM D790
	@Temperature 90.0 °C	@Temperature 194 °F	
	3.05 GPa	442 ksi	ASTM D790
	@Temperature 60.0 °C	@Temperature 140 °F	
Izod Impact, Notched	0.350 J/cm	0.656 ft-lb/in	ASTM D256
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	0.350 J/cm	0.656 ft-lb/in	ASTM D256
	@Temperature -20.0 °C	@Temperature -4.00 °F	
	0.450 J/cm	0.843 ft-lb/in	ASTM D256
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	1.00 J/cm ²	4.76 ft-lb/in ²	DIN 53453
	@Temperature -20.0 °C	@Temperature -4.00 °F	
	1.00 J/cm ²	4.76 ft-lb/in ²	DIN 53453
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	1.00 J/cm ²	4.76 ft-lb/in ²	DIN 53453
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Electrical Properties	Metric	English	Comments
Dielectric Strength	20.0 kV/mm	508 kV/in	IEC 243-1
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Comparative Tracking Index	500 V	500 V	IEC 112

Thermal Properties	Metric	English	Comments
CTE linear	35.0 µm/m °C	19.4 µin/in °F	ASTM D696


Property	23.0 mm (0.91 in)	12.7 mm (0.50 in)	ASTM D648
Deflection Temperature at 0.46 MPa (66 psi)	235 °C	455 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	170 °C	338 °F	ASTM D648
Vicat Softening Point	242 °C	468 °F	50°C/h 50N; ISO 306
Flammability, UL94	HB	HB	
Oxygen Index	27 %	27 %	ISO 4589

Processing Properties	Metric	English	Comments
Melt Temperature	260 - 290 °C	500 - 554 °F	
Mold Temperature	80.0 - 100 °C	176 - 212 °F	
Drying Temperature	80.0 - 100 °C	176 - 212 °F	Temperature can be reduced when using vacuum ovens.
Dry Time	>= 3 hour	>= 3 hour	Drying time can be reduced when using vacuum ovens.

Descriptive Properties

Heat Resistance - Ball Test (125°C)	Y	IEC 335
Heat Resistance - Ball Test (165°C)	Y	IEC 335
Injection Speed	medium	
Needle Burner Test	N	1.47 mm
	N	3.05 mm

**

Materials flagged as discontinued () are no longer part of the manufacturer's standard product line according to our latest information. These materials may be available by special order, in distribution inventory, or reinstated as an active product. Data sheets from materials that are no longer available remain in MatWeb to assist users in finding replacement materials.

Users of our Advanced Search (registration required) may exclude discontinued materials from search results.

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.