

Description

The *Premium 3D Printer Filament—PLA* is made of high purity polylactic acid (PLA) pellets with a tight diameter tolerance.

Applications & Usages

The PLA filament is the optimal choice for use in homes, schools, and hobbyists. A heated print bed is not required and when properly utilized, faster print speeds and lower layer heights can be achieved.

Benefits and Features

- **1.75 mm and 3.00 mm diameters**
- **Low diameter variance**
- **Vivid and unique colors such as Skin, Gold, Silver, Glow in the Dark, and so on**

3D-Filament Processing Parameters

<i>Processing Parameters</i>	<i>Temperature</i> ^{a)}
Working Temperature	210—220 °C [410–428 °F]
Bed Temperature	Not Required

a) Values may vary depending on the printer type, environmental conditions, and color of filament.
Adjust print temperatures by 5 °C until ideal flow and bed adhesion is obtained.

3D-Filament Properties

<i>Quality Control</i>	<i>Method</i>	<i>Value</i>
Density	ASTM D 1505	1.24 g/cm ³

<i>Physical Properties</i>	<i>Method</i>	<i>Value</i>
Tensile Strength	ASTM D 882, Machine Direction	100 N/mm ² [15 000 lb/in ²]
% Elongation	"	180%
Young's Modulus	"	3 500 N/mm ² [500 000 lb/in ²]
Elmendorf Tear	ASTM D 1922, Machine Direction	670 g/mm [17 g/mil]
Optical, Haze	ASTM D 1003	2.1%
Optical, Gloss 20°	ASTM D 1003	90%

<i>Thermal Properties</i>	<i>Method</i>	<i>Value</i>
Melting Point	ASTM D 3418	115—170 °C [239–338 °F]

Storage and Shelf Life

Store between 18 to 27 °C [65–80 °F] and protect from direct heat or sunlight. Keep sealed in an air tight container, away from humidity.

Shelf Life	Value
Unopened package	1 y from date of purchase
Opened package	Variable depending on storage conditions

Health and Safety

Please see the *Premium 3D Printer Filament-PLA Safety Data Sheet* (SDS) for more details on transportation, storage, handling and other security guidelines.

Environmental Impact: This product doesn't have any known environmental toxicity.



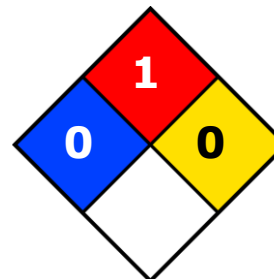
This product meets the European Directive 2011/65/EU Annex II (ROHS); recasting 2002/95/EC.

Health and Safety: This product is not considered to be hazardous for human health under normal use. It is widely used in the packing and food industry.

HMIS® RATING

HEALTH:	0
FLAMMABILITY:	1
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

Packaging and Supporting Products

Available Colors



Translucent



White



Black



Red



Yellow



Green



Blue



Orange



Purple



Grey



Pink



Brown



Gold



Silver



Glow in the Dark



Skin



Navy



Lime

Available Sizes

<i>Diameter</i>	<i>Filament Length</i>		
	0.25 kg spools	0.50 kg spools	1.0 kg spools
1.75 mm	85 m	170 m	340 m
3.00 mm	28.8 m	57.5 m	115 m

<i>Spool Weight</i>	<i>Dimensions</i>		
	Inner diameter	Outer diameter	Width
0.25 kg	32 mm	160 mm	57 mm
0.50 kg	32 mm	160 mm	57 mm
1.00 kg	57 mm	180 mm	92 mm

<i>Diameter</i>	<i>Spool Weight</i>	<i>Net Volume</i>		<i>Net Weight</i>	
	kg	L	qt	kg	lb
1.75 mm or 3.00 mm	0.25	0.202	0.213	0.25	0.55
	0.50	0.403	0.426	0.50	1.1
	1.0	0.806	0.852	1.0	2.2

Note: Some colors are not available in all sizes. Use the 3D filament Part Selection Tool for PLA on the MG Chemical web site or [click here](#).



ISO 9001 Registered Quality System.
Burlington, Ontario, Canada QMI File # 004008

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PLA

Supporting Products

- *3D Printing Masking Tape*, Cat. No. MAS100-15, MAS200-15
- *3D Printing Polyimide Tape*, Cat. No. POL100, POL200
- *Acetone*, Cat. No. 434-1L, 434-4L
- *d-Limonene, Pure Grade*: Cat. No. 433-1L, 433-4L

Technical Support

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

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Burlington, Ontario, Canada
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Surrey, British Columbia, Canada
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Warranty

M.G. Chemicals Ltd. warrants this product for 12 months from the date of purchase by the end user. *M.G. Chemicals Ltd.* makes no claims as to shelf life of this product for the warranty. The liability of *M.G. Chemicals Ltd.* whether based on its warranty, contracts, or otherwise shall in no case include incidental or consequential damage.

Disclaimer

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. *M.G. Chemicals Ltd.* does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

Mouser Electronics

Authorized Distributor

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MG Chemicals:

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[PLA17RE1](#) [PLA17FLYE1](#) [PLA30BR1](#) [PLA17PU1](#) [PLA30GO1](#) [PLA30NA1](#) [PLA30BK1](#) [PLA17OR1](#) [PLA30PU1](#)
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