

Premium 3D Printer Filament

Description

PLA is the most popular resin for 3D printing because it is easy to use and has almost no odor. It adheres well to masking tape without requiring a heated printing bed or noxious solvents. It is an optimal choice for homes, schools and laboratories, and has many commercial applications.

MG Chemicals premium 3D printing filaments are manufactured under strict quality control to ensure consistency. Our spools have a large hub to ensure uniform winding, and cut-outs on the sides so the user can easily see how much filament is left.

Features and Benefits

- Diameter: 1.75 or 2.85 mm; Weight: 0.5 or 1 kg/spool
- Dimensional accuracy: ± 0.03 mm
- Vacuum-sealed with desiccant in resealable bags
- Recommended print temperature: 200 to 220 °C (392 to 428 °F)
- Recommended bed temperature: 22 to 50 °C (72 to 122 °F)
- Spool diameter: 7 $\frac{3}{4}$ "; Spool width: 2 $\frac{1}{2}$ "; Hub diameter: 3 $\frac{1}{2}$ "; Hub hole diameter: 2 $\frac{1}{8}$ "

Usage Parameters

| Properties | Value |
|------------------------------|--|
| Storage temperature | 18–27 °C [65–80 °F] ^{a)} |
| Shelf life, unopened package | 1 y from date of purchase |
| Shelf life, opened package | Variable depending on storage conditions |

a) Keep sealed in an air tight container, away from humidity.

Temperature Ranges

| Properties | Value |
|-------------------|-------------------------|
| Print temperature | 200–220 °C [392–428 °F] |
| Bed temperature | 22–50 °C [72–122 °F] |

NOTE: 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.

Properties

| Physical Properties | Method | Value |
|---------------------|--------------------------------|---|
| Density | ASTM D 1505 | 1.24 g/cm ³ |
| Tensile strength | ASTM D 882, Machine Direction | 100 N/mm ² [15 000 lb/in ²] |
| % Elongation | ASTM D 882, Machine Direction | 180% |
| Young's modulus | ASTM D 882, Machine Direction | 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% |
| Thermal Properties | Method | Value |
| Melting point | ASTM D 3418 | 115 to 170 °C [239 to 338 °F] |

Storage

Store between 18 to 27 °C [65 to 80 °F] in a dry area, away from sunlight. Keep sealed in an air tight container, away from humidity.

Health, Safety, and Environmental Awareness

Please see the PLA Safety Data Sheet (SDS) for further details on transportation, storage, handling, safety guidelines, and regulatory compliance.

Packaging and Supporting Products

Available Colors



Fluorescent Red
PLA17FLRE1



Fluorescent Yellow
PLA17FLYE1



Thermochromic Red
PLA17THRE1



Black
PLA17BK1
PLA30BK1



Blue
PLA17BL1
PLA30BL1



Brown
PLA17BR1
PLA30BR1



Gold
PLA17GO1
PLA30GO1



Green
PLA17GR1
PLA30GR1



Grey
PLA17GY1
PLA30GY1



Lime Green
PLA17LI1
PLA30LI1



Navy
PLA17NA1
PLA30NA1



Orange
PLA17OR1
PLA30OR1



Pink
PLA17PI1
PLA30PI1



Purple
PLA17PU1
PLA30PU1



Red
PLA17RE1
PLA30RE1



Silver
PLA17SI1
PLA30SI1



Light Skin
PLA17SK1
PLA30SK1



Translucent
PLA17TL1
PLA30TL1



White
PLA17WH1
PLA30WH1



Yellow
PLA17YE1
PLA30YE1



Glow in the Dark Green
PLA17GD1
PLA17GD5
PLA30GD1



Super Glow Natural
PLA17SGN1
PLA30SGN1



Fluorescent Green
PLA17FLGR1



Copper
PLA17CP1

Dimensions for 0.5 kg Spool

| Filament Diameter | Filament Length |
|-------------------|-----------------|
| 1.75 mm | 167 m |

Dimensions for 1.0 kg Spool

| Filament Diameter | Filament Length |
|-------------------|-----------------|
| 1.75 mm | 335 m |
| 2.85 mm | 126 m |

NOTE: Dimensions listed above are approximations.

| Net Weight | Net Volume | Packaging Weight |
|-----------------|------------------|-------------------|
| 1.0 kg [2.2 lb] | 806 mL [1.70 pt] | 1.35 kg [2.98 lb] |

Supporting Products

- 3D Printing Masking Tape: Cat. No. MAS100-15
- 3D Printing Polyimide Tape: Cat. No. POL100, POL200
- Acetone: Cat. No. 434-1L, 434-4L
- d-Limonene Industrial Strength: Cat. No. 433C-1L, 433C-4L

Technical Support

Please contact us regarding any questions, suggestions for improvements, or problems with this product. Application notes, instructions and FAQs are located at www.mgchemicals.com.

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Disclaimer

This information is believed to be accurate. It is intended for professional end users who have the skills required 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.



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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