

## Description

The *Premium 3D Printer Filament—PETG* is made with polyethylene terephthalate glycol-modified (PETG) pellets. PETG is a high strength transparent thermoplastic with excellent moisture and chemical resistance.

## Applications & Usages

The PETG filament has very low shrinkage.

## Benefits and Features

- **1.75 mm diameter**
- **Low diameter variance**
- **Low odor**
- **Low shrinkage**

## 3D-Filament Processing Parameters

| <i>Processing Parameters</i> | <i>Recommendations</i>  |
|------------------------------|-------------------------|
| Working Temperature          | 210–240 °C [410–464 °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>           |
|------------------------|---------------|------------------------|
| Specific Gravity       | ASTM D 1505   | 1.27 g/cm <sup>3</sup> |

| <i>Physical Properties</i> | <i>Method</i> | <i>Value</i>                                          |
|----------------------------|---------------|-------------------------------------------------------|
| Tensile Strength           | ASTM D 882    | 50 N/mm <sup>2</sup> [7 300 lb/in <sup>2</sup> ]      |
| % Elongation               | "             | 10%                                                   |
| Flexural Modulus           | "             | 1 800 N/mm <sup>2</sup> [260 000 lb/in <sup>2</sup> ] |

## 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 the date of purchase            |
| Opened package   | Variable depending on storage conditions |

## Health and Safety

Please see the *Premium 3D Printer Filament-PETG 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.



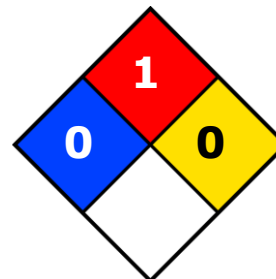
This product meets the European Directive 2011/65/EU Annex II (ROHS); recasting 2002/95/EC.

**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



Natural



White



Black



Red



Blue

### Available Sizes

| <i>Diameter</i> | <i>Filament Length</i> |               |
|-----------------|------------------------|---------------|
|                 | 0.50 kg spools         | 1.0 kg spools |
| 1.75 mm         | 160 m                  | 320 m         |

| <i>Spool Weight</i> | <i>Dimensions</i> |                |       |
|---------------------|-------------------|----------------|-------|
|                     | Inner diameter    | Outer diameter | Width |
| 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         | 0.50                | 0.394             | 0.416 | 0.50              | 1.1 |
|                 | 1.00                | 0.787             | 0.832 | 1.0               | 2.2 |

### 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



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

## Premium 3D Printer Filament—PETG

PETG

### 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](http://www.mgchemicals.com).

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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

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