PETG Technical Data Sheet

Premium 3D Printer Filament

Description

PETG is a high-strength transparent thermoplastic with excellent moisture and chemical resistance. It does not require a heated print bed, is easy to use, and has low shrinkage and minimal odor. It is excellent for applications where strong, transparent prints are desired, and it is widely used in mechanical parts fabrication and robotics.

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 mm; Weight: 1 kg/spool*
- *Dimensional accuracy: ±0.03 mm*
- *Vacuum-sealed with desiccant in resealable bags*
- *Recommended print temperature: 210 to 240 °C (410 to 464 °F)*
- *Recommended bed temperature: 22 to 50 °C (72 to 122 °F)*
- *Spool diameter: 7¾"; Spool width: 2½"; Hub diameter: 3½"; Hub hole diameter: 2⅛"*

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
Working temperature	210–240 °C [410–464 °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	1.27 g/cm^3
Tensile strength	ASTM D 882	50 N/mm^2 [7 300 lb/in^2]
Young's modulus	ASTM D 882	1 800 N/mm^2 [261 000 lb/in^2]
% Elongation	ASTM D 882	10%
Elmendorf tear	ASTM D 1922	40 N/mm^2 [5 800 lb/in^2]
Spencer impact	—	6.7 J/m^2
Optical transmittance	ASTM D 1003	90%
Thermal Properties	**Method**	**Value**
Melting point	ASTM D 3418	180 °C [356 °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 PETG Safety Data Sheet (SDS) for further details on transportation, storage, handling, safety guidelines, and regulatory compliance.

Packaging and Supporting Products

Available Colors

Natural
PETG17WH1

Dimensions for 1.0 kg Spool

Filament Diameter	Filament Length
1.75 mm	327 m

NOTE: Dimensions listed above are approximations.

Net Weight	Net Volume	Packaging Weight
1.0 kg [2.2 lb]	787 mL [1.66 pt]	1.35 kg [2.98 lb]

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.

Email: support@mgchemicals.com
Phone: +(1) 800-340-0772 (Canada, Mexico & USA)
+(1) 905-331-1396 (International)
+(44) 1663 362888 (UK & Europe)
Fax: +(1) 905-331-2862 or +(1) 800-340-0773

Mailing address:

Manufacturing & Support
1210 Corporate Drive
Burlington, Ontario, Canada
L7L 5R6

Head Office
9347–193rd Street
Surrey, British Columbia, Canada
V4N 4E7

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.