## Description

The *Premium 3D Printer Filament—WOOD* is made with polylactic acid (PLA) polymer and wood.

## Benefits and Features

- **1.75 mm diameter**
- **Low diameter variance**
- **Provides a wood like color and appearance**
- **Good moisture and chemical resistance**

## 3D-Filament Processing Parameters

| ***Processing Parameters*** | ***Recommendations*** |
|---|---|
| Working Temperature | 185—230 °C [365–446 °F] a) |
| Bed Temperature | Not Required |
| Nozzle Size | ≥0.5 mm b) |

a) Values may vary depending on the printer type and environmental conditions. Adjust print temperatures by 5 °C until ideal flow and bed adhesion is obtained.
b) To avoid clogging of the nozzle, prefer larger nozzle sizes.

## 3D-Filament Properties

| ***Quality Control*** | ***Method*** | ***Value*** |
|---|---|---|
| Density | ASTM D 1505 | 1.25 g/cm$^3$ |
| ***Physical Properties*** | ***Method*** | ***Value*** |
| Color | | Wood a) |
| Tensile Strength | ASTM D 882, Machine Direction | 37 N/mm$^2$ [5 300 lb/in$^2$] |
| % Elongation | " | 6% |
| Young's Modulus | " | 3 100 N/mm$^2$ [444 000 lb/in$^2$] |
| Optical Transmittance | ASTM D 1003 | 1.2% |

a) Higher printing temperatures produce darker wood colors.

| ***Thermal Properties*** | ***Method*** | ***Value*** |
|---|---|---|
| Melting Point | ASTM D 3418 | 130—210 °C [266–410 °F] |

## Storage and Shelf Life

Store between 18 to 27 °C [65 to 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-WOOD* **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.

RoHS COMPLIANT

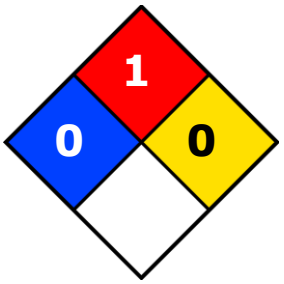
This product meets the European Directive 2011/65/EU Annex II (ROHS); recasting 2002/95/EC.

***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

| *Cat. No.* | *Color* | *Diameter* | *Spool Weight* | *Filament Length* | *Spool Dimensions* | | |
|---|---|---|---|---|---|---|---|
| | | | | | Inner diameter | Outer diameter | Width |
| WOOD17W5 | Wood | 1.75 mm | 0.50 kg | 170 m | 32 mm | 160 mm | 57 mm |
| WOOD17W1 | Wood | 1.75 mm | 1.0 kg | 330 m | 57 mm | 180 mm | 92 mm |
| WOOD30W1 | Wood | 2.85 mm | 1.0 kg | 120 m | 57 mm | 180 mm | 92 mm |
| WOOD17D1 | Dark wood | 1.75 mm | 1.0 kg | 330 m | 57 mm | 180 mm | 92 mm |

**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, suggestions for improvements, or problems with this product. Application notes, instructions and FAQs are located at 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

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.