Technical Data Sheet
BioFil - Wood

Print date: 20-07-2023 **Version:** 1.0

Product specifications

BioFil - Wood is a home compostable filament with lots of wood inside. The high wood filling gives BioFil - Wood its true wooden feel, look, and smell.

Unlike PLA-based filaments, BioFil - Wood is home compostable. By that, it has a much lower environmental impact. BioFil - Wood contains 100% natural and renewable resources only. This makes BioFil - Wood our most sustainable wood filament yet.

BioFil - Wood has excellent machining capabilities. It is a breeze to sand, glue, and drill your 3D printed parts. It is also very easy to apply paint and lacquer on printed parts. BioFil - Wood behaves like real wood.

Important key features

- A fully home compostable 3D printer filament.
- Real wood feel, look, and smell.
- Excellent machinability and post-processing properties.
- Made from food contact approved materials.

Suitable applications

- Home decor.
- Orthopedics .
- Renovation of wooden parts/elements
- Toys and models.
- Decorative art.

Nozzle size: ≥ 0.6mm

BioFil - Wood has a very high wood content. Therefore it is strongly recommended to 3D print BioFil – Wood only with nozzles with a diameter of 0.6mm or bigger.
Increasing the layer height in the print settings will result in an even more wooden appearance of 3D printed parts.

A 3D printing filament with high natural wood filling

BioFil - Wood contains lots of natural wood fibers. Just like real wood, these wood fibers can have slightly different colors between batches. This gives BioFil - Wood its natural and wood-like appearance. Each 3D print will be unique.

Material properties	**Typical value**	**Test Method**
Density	1.26 g/cm3	DSC
Mechanical properties		
Tensile modulus (23°C, 1mm/min)	3195 MPa	ISO 527-1/-2
Tensile strength at break (23°C, 5mm/min)	34 MPa	ISO 527-1/-2
Elongation at break (23°C, 5mm/min)	3%	ISO 527-1/-2
Charpy unnotched impact strength, 23°C	15 kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	3 kJ/m^2	ISO 179/1eU
Thermal properties		
Vicat softening temperature	50°C	-
HDT	55°C	-

Technical Data Sheet
BioFil - Wood

Food Contact Approval

BioFil - Wood is compliant with the requirements for plastic materials used for articles or parts of articles intended to come into contact with food in accordance with the following European legislation:

- Regulation (EC) **No 1935/2004** of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives **80/590/EEC** and **89/109/EEC**;

- Commission Regulation (EU) **No 10/2011** of 14 January 2011 on plastic materials and articles intended to come into contact with food (and amendments).

Storage and handling

Filament should be stored at room temperature in a dry and dark place with humidity below 15%. Recommended storage temperature is ca. 18-25°C (64.4 -77.0°F). Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of 24 months. To obtain the best parameters of the printed object, it is recommended to dry the material prior to usage and to 3D print it directly from a dry box.

Product export information

HS Code	Description	Origin
39169090	Monofilament for 3D printing	European Union

Disclaimer

The product- and technical data provided in this datasheet is correct to the best of FormFutura BV's knowledge and are intended for reference and comparison purposes only. Actual values may vary according to printing conditions, model complexity, environmental conditions, etcetera. Typical values are indicative only and are not to be construed as being binding specifications. All other information supplied, including that herein, is considered accurate but is furnished upon the express condition that the customer shall make its own assessment to determine a product's suitability for a particular purpose. We make no warranty, express or implied, including regarding any information supplied or the data upon which it is based or the results to be obtained from the use of such products or information, or concerning product, whether of satisfactory quality, merchantability, fitness for any particular purpose or otherwise, or with respect to intellectual property infringement as a result of use of information or products, and none shall be implied.