

## BASIC INFORMATION

**PRODUCT NAME:** FILAMENT 3D BioWOOD 1.75mm

**PRODUCT DESCRIPTION:** BioWOOD filament – thermoplastic polymer in the form of a thread, designed for 3D printing using the FFF/FDM method. Filament coiled on spools or cardboard core (no spool), vacuum-packed with desiccant in a PA/PE bag, and then in a box. The product is designed for use with 3D printers using FDM technology. It should be used in a well ventilated room to avoid exposure to fume emissions during printing. It is important to avoid direct contact with hot printer components, which can lead to burns. Filament should be stored in a dry place, in a closed container and away from children. It is recommended to use the filament within the recommended printing temperature range for optimum results. Dispose of waste filament in accordance with local regulations. The product has been designed with safety in mind and meets all relevant standards for consumer use.

**STORAGE:** Store in dry area. Store in a closed container.

## PRODUCT PARAMETERS

PARAMETER	VALUE
Filament diameter [mm]	1.75
Diameter tolerance [mm]	+/-0,05
Oval tolerance [mm]	+/-0,02

## RECOMMENDED PRINTING PARAMETERS

PARAMETER	VALUE
3D printing temperature [C]	170-210
Heated bed [C]	30-50
Cooling fan [%]	100
Recommended nozzle size [mm]	>0.5 mm
Drying conditions [C/h]	50/4

\* Recommended to pre-dry the filament before each print.

## PHYSICAL PARAMETERS OF THE MATERIAL

PARAMETER	VALUE	UNIT	TEST METHOD
Gęstość/Density	1.26	g/cm <sup>3</sup>	-
VICAT	50	°C	-
Moduł sprężystości przy rozciąganiu/Tensile modulus	3195	MPa	ISO 527 (1 mm/min)
Wytrzymałość na rozciąganie/Tensile strength	34	MPa	ISO 527 (5 mm/min)
Wydłużenie przy zrywaniu/Elongation at break	3	%	ISO 527 (5 mm/min)
Udarność metodą Charpy'ego/Charpy impact strength	15	kJ/m <sup>2</sup>	ISO 179/1 eU
Udarność metodą Charpy'ego (z karbem)/Charpy impact strength (notched)	3	kJ/m <sup>2</sup>	ISO 179/1 eA
Dopuszczenie do kontaktu z żywnością/ Food Contact Approval	TAK/YES	-	-

The values above have been measured using standard test specimens made of non-colored material at room temperature. The figures should be considered as indicative values only. Actual properties of BioWOOD parts can be affected by the printing parameters, design of the model, ambient conditions, application of the printout etc. It is essential that users test our products to determine whether they are suitable for their intended use. ROSA PLAST Sp. z o.o. accepts no liability for any health detriment or material losses or any other losses related to the use of the material. Additional documents, certificates and detailed technical information can be provided on special request.

