

## BASIC INFORMATION

**PRODUCT NAME:** FILAMENT 3D BioCREATE HT 1.75mm

**PRODUCT DESCRIPTION:** BioCREATE HT filament is a thermoplastic polymer in the form of a filament, designed for 3D printing using the FFF/FDM method. The filament is supplied either wound on a spool or on a cardboard core (without spool), vacuum-sealed in a bag with a desiccant, and packed in a cardboard box. It is intended for use with FDM 3D printers. The product should be used in a well-ventilated area to avoid exposure to emissions during printing. It is important to avoid direct contact with the printer's hot components, as this may cause burns. The filament should be stored in a dry place, in a sealed container, and kept out of reach of children. For best results, it is recommended to use the filament within the specified temperature range. Any filament waste should be disposed of in accordance with local regulations. This product is designed with safety in mind and complies with all relevant consumer use standards.

**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]	220-260
Heated bed [C]	60-80
Cooling fan [%]	50-100
Closed chamber	no
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
<b>Gęstość / Density</b>	1.3	g/cm <sup>3</sup>	-
<b>Moduł sprężystości przy rozciąganiu / Tensile modulus</b>	5100	MPa	ISO 527
<b>Wytrzymałość na rozciąganie / Tensile strength</b>	51	MPa	ISO 527
<b>Granica plastyczności / Yield stress</b>	51	MPa	ISO 527
<b>Odkształcenie przy granicy plastyczności / Yield strain</b>	1.9	%	ISO 527
<b>Wytrzymałość na rozciąganie przy zrywaniu / Tensile stress at break</b>	50	MPa	ISO 527
<b>Wydłużenie przy zerwaniu / Tensile Strain at Break</b>	2	%	ISO 527
<b>Udarność metodą Charpy'ego / Charpy impact strength</b>	44	kJ/m <sup>2</sup>	ISO 179/1eU ( 23 C)
<b>VICAT A</b>	160	C	ISO 306
<b>HDT</b>	84	C	ISO 75 (0,45 MPa)

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 BioCREATE HT 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.

