

## BASIC INFORMATION

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

Refill PCTG filament is co-polyester designed for 3D printing using the FFF/FDM method. Filament coiled on Refill for spools (no spool) on paper core, vacuum-packed with desiccant in a PA/PE bag, and then in a box. Main attributes: High transparency, high impact strength, high chemical resistance. The product is designed for use with 3D printers using FDM technology. It should be used in a well ventilated room to avoid

**PRODUCT DESCRIPTION:** 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]	240-270
Heated bed [C]	60-80
Cooling fan [%]	0-60
Closed chamber	recommended
Drying conditions [C/h]	60/4

## PHYSICAL PARAMETERS OF THE MATERIAL

PARAMETER	VALUE	UNIT	TEST METHOD
<b>Density</b>	1.24	g/cm <sup>3</sup>	ASTM D 792
<b>Tensile modulus at Yield</b>	44	MPa	ISO 527-2
<b>Tensile strength at break</b>	46	MPa	ISO 527-2
<b>Flexural Modulus</b>	1.6	MPa	ISO 178
<b>Flexural Strength</b>	60	MPa	ISO 178
<b>Izod impact strength (notched)</b>	92	kJ/m <sup>2</sup>	ISO 180
<b>HDT (0,455 MPa/ 1,82 Mpa)</b>	76/64	°C	ISO 75
<b>Hardness Rockwell</b>	105	R-Scale	ASTM D785
<b>Transmittance</b>	89	%	ASTM D1003
<b>GWEPT (Glow-wire flammability test method for end-product)</b>	850	C	EN IEC 60695-2-11

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 PCTG 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.

