

## BASIC INFORMATION

**PRODUCT NAME:** FILAMENT 3D ASA+10CF 1.75mm

ASA+10CF filament is a copolymer of acrylonitrile, styrene, and acrylates with a 10% addition of carbon fibers, supplied in the form of filament. The filament is wound onto a cardboard core (without a spool), vacuum-sealed in a bag with a desiccant, and packed in a cardboard box. The product is intended for use with FDM 3D printers. It should be used in a well-ventilated area to avoid exposure to emissions during printing.

**PRODUCT DESCRIPTION:** It is important to avoid direct contact with hot printer components, as this can cause burns. The filament should be stored in a dry place, inside a sealed container, and kept out of reach of children. It is recommended to use the filament within the specified printing temperature range for optimal results. Filament waste should be disposed of according to local regulations. The product has been 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]	250-280
Heated bed [C]	70-110
Cooling fan [%]	0-30
Closed chamber	recommended
Closed chamber temperature [C]	50-80
Recommended nozzle	steel
Drying conditions [C/h]	60-80/4-6

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

## PHYSICAL PARAMETERS OF THE MATERIAL

PARAMETER	VALUE	UNIT	TEST METHOD
<b>Gęstość / Density</b>	1,12	g/cm <sup>3</sup>	-
<b>Moduł sprężystości przy rozciąganiu / Tensile modulus (E)</b>	2870	MPa	ISO 572
<b>Wytrzymałość na rozciąganie przy granicy plastyczności / Tensile strength at yield</b>	75	MPa	ISO 527
<b>Wytrzymałość na rozciąganie do zerwania / Tensile strength at break</b>	72	MPa	ISO 527
<b>Wydłużenie przy zrywaniu / Elongation at break</b>	5	%	-
<b>Udarność metodą Charpyego / Impact strength Charpy method</b>	4	kJ/m <sup>2</sup>	ISO 179 (23 C)
<b>VICAT B</b>	95	C	ISO 306

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 ASA+10CF 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.

