

## BASIC INFORMATION

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

ASA filament is a thermoplastic polymer supplied in filament form, designed for FFF/FDM 3D printing. Filament wound on a spool or cardboard coil (ReFill version), vacuum packed in a PET/PE bag with moisture absorber. Packed in a cardboard box. The product is designed for use with 3D printers using FDM technology. It should be used in a wellventilated room to avoid exposure to fume emissions during printing. It is

**PRODUCT DESCRIPTION:** 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 felt material 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]	230-260
Heated bed [C]	70-110
Cooling fan [%]	0-50
Closed chamber	recommended
Closed chamber temperature [C]	50-80
Drying conditions [C/h]	80-90/3-4

## PHYSICAL PARAMETERS OF THE MATERIAL

PARAMETER	VALUE	UNIT	TEST METHOD
<b>Density</b>	1,07	g/cm <sup>3</sup>	-
<b>VICAT</b>	94	C	ASTM D1525
<b>Tensile modulus</b>	1725	MPa	ASTM D638 (1 mm/min)
<b>Tensile strength to break</b>	40	MPa	ASTM D638 (50 mm/min)
<b>Elongation at break</b>	35	%	ASTM D638 (50 mm/min)
<b>Izod impact strength (notched)</b>	40	kg*cm/cm	ASTM 256
<b>Hardness</b>	91	R-scale	ASTM D785
<b>HDT</b>	85	C	ASTM D648 (6,4mm - 18,6kg)
<b>HDT</b>	94	C	ASTM D648 (6,4mm - 4,6kg)
<b>Flame rating</b>	HB	-	UL94 (1,6mm - 3,2mm)
<b>Dielectric strength</b>	28	kV/mm	ASTM D149
<b>Comparative Tracking Index CTI</b>	PLC 0	-	UL 746
<b>Volume resistivity</b>	1*10 <sup>15</sup>	Ohm*cm	ASTM D257

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 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.

