TECHNICAL DATA SHEET

Date of issue: 08.09.2021

PRODUCT NAME: 3D FILAMENT ROSA-Flex 85A 1,75mm

PRODUCT DESCRIPTION: ROSA-Flex 85A filament - thermoplastic polyurethane in the form of a thread, designed for 3D printing using the FFF/FDM method. Filament coiled on spools, vacuum-packed with desiccant in a PET/PE bag, and then in a box.

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
Net weight [g]	500
Weight with packaging [g]	900
Spool weight [g]	245
Small spool dimensions [mm] (ø / height / hole ø)	200/55/52
Box dimensions [mm]	218/209/62

RECOMMENDED PRINTING PARAMETERS

Parameter	Value
Print temperature [°C]	215-250
Bed temperature [°C]	30-60

PHYSICAL PARAMETERS OF THE MATERIAL

Parameter	Value	Unit	Test method
Density	1.18	g/cm^3	ISO 1183
Tensile strength	35	MPa	EN 12803
Stress at 100% elongation	6	MPa	EN 12803
Elongation at break	520	%	EN 12803
Glass transition temperature (Tg)	-40	°C	DMA

Przedsiębiorstwo Handlowo-Produkcyjne ROSA Alicja Sakowicz-Soldatke
ul. Hipolitowska 102, 05-074 Hipolitów
tel.: +48 22 783 62 62, www.rosa3d.pl

TECHNICAL DATA SHEET

Date of issue: 08.09.2021

Hardness	84	Shore A	ISO 868
Tear strength	78	kN/m	ISO 34
Abrasion resistance	29	mm^3	EN 12770
Compression	29	%	ISO 815 (set at 23°C)
Compression	42	%	ISO 815 (set at 70°C)
Hydrolysis resistance, expressed as variation of **elongation at break** after 30 days at 80°C	+4	%	EN 12803
Hydrolysis resistance, expressed as variation of **tensile strength** after 30 days at 80°C	-9	%	EN 12803
Hydrolysis resistance, expressed as variation of **tear strength** after 30 days at 80°C	-8	%	ISO 34

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 ROSA-Flex 85A 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. PHP ROSA Alicja Sakowicz-Soldatke accepts no liability for any health detriment or material losses or any other losses related to the use of the material.

Przedsiębiorstwo Handlowo-Produkcyjne ROSA Alicja Sakowicz-Soldatke
ul. Hipolitowska 102, 05-074 Hipolitów
tel.: +48 22 783 62 62, www.rosa3d.pl