

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

PRODUCT DESCRIPTION: ROSA-Flex 85A filament is a 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] (\varnothing / height / hole \varnothing) | 200/55/52 |
| Box dimensions [mm] | 218/209/62 |

RECOMMENDED PRINTING PARAMETERS

| Parameter | Value |
|------------------------|---------|
| Print temperature [°C] | 220-250 |
| 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 |

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| | | | |
|---|----|-----------------|-----------------------|
| 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. 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.



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