**Product card:** SILK filament for 3D printing
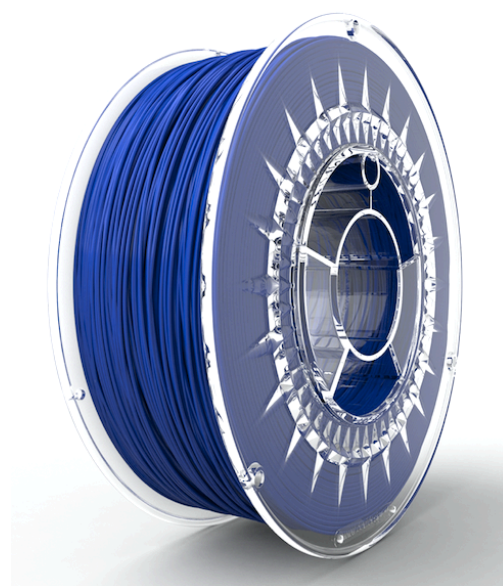
**Product description:** SILK filament – a thermoplastic material in the form of fiber, used for 3D-printing using the FFF method. Filament wound on a spool, vacuum packed with a moisture absorber. The spool contains 1kg of net material. It can be used in all FFF printers that are not protected from external suppliers and open source structures before using. SILK is mix of PLA and PET-G materials is characteristic by very high gloss (shiny).

## Physical properties of the product:

| | |
|---|---|
| Diameter of filament | 1.75 mm |
| Dimensional tolerance of filament | +/- 0.05 mm |
| Roundness of filament | +/- 0.02 mm |
| Surface of the material | High gloss |
| Shrinkage of the material | Very low |
| Product weight | 1.0 kg net, 1.36 kg gross |
| Spool - material | Transparent policarbonate |
| Weight of the empty spool | ~250 g |
| The diameter of the spool | 200 mm |
| Width of spool | ~70 mm |
| Diameter of mounting hole | 52 mm |
| Packaging | Printed cardboard |
| Package size | ~205x205x80 mm |
| Vacuum packing | Yes |
| Moisture absorber | Yes |



## Suggested printing parameters:

| | |
|---|---|
| Hotend | 225-245°C |
| Heated bed | 50-60°C |
| Cooling the printout | Optional |

*Due to the structural differences of printers, the above figures should be considered as guidelines and the corresponding values must be determined experimentally.*

## Physical properties of the material:

| | | |
|---|---|---|
| Specific Density | 1.23 g/cm3 | - |
| Glass Transition Temperature | 80°C | ASTM 3418 |
| Moisture | ≤ 0.3% | - |

## Availability of colors and diameters:

| Color | RAL | 1.75 - 1kg |
|---|---|:---:|
| White | 9016 | ✓ |
| Bright orange | 1034 | ✓ |
| Bright pink | 3015 | ✓ |
| Red | 3014 | ✓ |
| Blue | 5024 | ✓ |
| Bright green | 6019 | ✓ |
| Green | 6032 | ✓ |
| Silver | | ✓ |
| Light gold | 1032 | ✓ |
| Gold | 1024 | ✓ |
| Copper | | ✓ |
| Bronze | 8025 | ✓ |