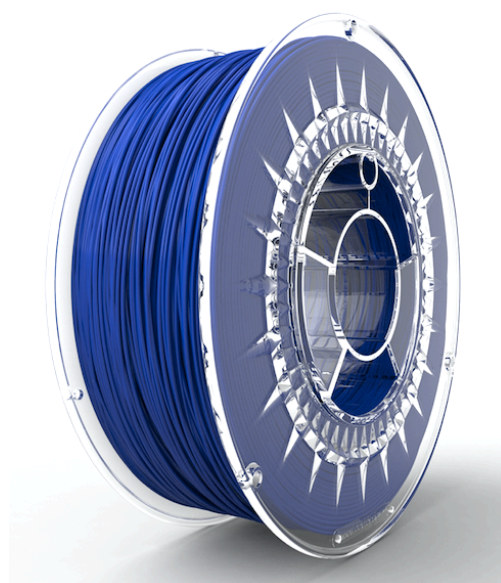**Product card:** ASA filament for 3D printing.

**Product description:** Filament ASA - thermoplastic plastic 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 1 kg of net material. It can be used in all FFF printers that are not protected from external suppliers and open source structures before using. ASA is a material with increased resistance to weather conditions and UV radiation (relative to ABS), easily subjected to mechanical treatment such as grinding or drilling, the material is soluble in acetone.

## 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 | Light Gloss |
| Shrinkage of the material | Large |
| Product weight | 1.0 kg net, 1.4 kg gross |
| Spool - material | Transparent policarbonate |
| Weight of the empty spool | ~257 g |
| The diameter of the spool | 200 mm |
| Width of spool | ~70 mm |
| Diameter of mounting hole | 52 mm |
| Packaging | Printed cardboard |
| Package size | ~230x210x80 mm |
| Vacuum packing | Yes |
| Moisture absorber | Yes |



## Suggested printing parameters:

| | |
|---|---|
| Hotend | 230-240°C |
| Heated bed | 90-100°C |
| Cooling the printout | Not recommended |

*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 Gravity | 1.07 g/cm3 | ASTM D792 |
| Vicat Softening Temperature | 96°C | ASTM D1525 |
| Rockwell Hardness (R-Scale) | 107 | ASTM D785 |
| Tensile Strength - Yield | 500 kg/cm2 | ASTM D638 |
| Tensile Elongation - Break | 20% | ASTM D638 |
| Flammability | HB | UL 94 |

## Availability of colors and diameters:

| Color | Kolor | 1.75 |
|---|---|---|
| Natural | Naturalny | ✓ |
| Bright Orange | Jasnopomarańczowy | ✓ |
| Hot Red | Czerwień | ✓ |
| Navy Blue | Granatowy | ✓ |
| Green | Zielony | ✓ |
| Aluminum | Aluminiowy | ✓ |
| Brown | Brązowy | ✓ |
| Black | Czarny | ✓ |