

**PRODUCT NAME:** 3D FILAMENT ABS FR V0 1,75mm

**PRODUCT DESCRIPTION:** ABS V0 FR filament - poli(akrylonitryl-co-butadien-co-styren) 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 PA/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]   | <b>700</b>                | <b>2500</b> |
| Weight with packaging [g]                              | 1200                      | 3500        |
| Spool weight [g]                                       | ECO PP wood: 190          | 710         |
|  | Transparent PC: 245       |             |
| Spool dimensions [mm]( $\phi$ / height / hole $\phi$ ) | ECO PP wood: 200/57/52    | 300/100/52  |
|  | Transparent PC: 200/55/52 |             |
| Box dimensions [mm]                                    | 220/210/65                | 325/310/110 |

## RECOMMENDED PRINTING PARAMETERS

| Parameter  | Value     |
|--|-----------|
| Print temperature [°C]   | 230-270   |
| Bed temperature [°C]   | 80-110    |
| Cooling [%]  | 0-50      |
| Closed chamber   | Necessary |
| Chamber temperature [°C]   | 50-80     |
| <b>We recommend drying the filament before printing for 4-6 hours at 80-90°C</b> |           |

### PHYSICAL PARAMETERS OF THE MATERIAL

| Parameter                      | Value | Unit              | Test method                 |
|--------------------------------|-------|-------------------|-----------------------------|
| Density                        | 1,20  | g/cm <sup>3</sup> | D792                        |
| VICAT                          | 119   | °C                | ASTM D1525 (10 N - 120°C/h) |
| VICAT                          | 109   | °C                | ASTM D1525 (50 N - 120°C/h) |
| Tensile modulus                | 2450  | MPa               | D790                        |
| Tensile strength               | 42    | MPa               | D638 (23°C 50 mm/min)       |
| Tensile strength at break      | 39    | MPa               | D638 (23°C 50 mm/min)       |
| Tensile elongation             | 5     | %                 | D638 (23°C 50 mm/min)       |
| Glow-Wire Ignition Temperature | 960   | °C                | IEC 60695-2-13 (2,0 mm)     |
| Flame rating                   | V0    | -                 | UL94 (1,6 mm)               |
| Flame rating                   | V0    | -                 | UL94 (3,2 mm)               |
| UV resistant                   | YES   | -                 | -                           |

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 ABS V0 FR 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.

