

## TECHNICAL DATA SHEET

FILAMENT 3D PET-G HT Date of issue: 18.04.2024r. Date of update: version 1

#### **BASIC INFORMATION**

| PRODUCT NAME:        | FILAMENT 3D PET-G HT 1,75mm                                                                                                                                                                                                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PRODUCT DESCRIPTION: | PET-G HT filament is poly(ethylene terephthalate) with glycol in<br>the form of a filament, designed for FFF/FDM 3D printing. The<br>supplied filament is wound on a spool or on a cardboard coil<br>(without spool), vacuum sealed in a bag with moisture absorber<br>and packaged in a cardboard box. |

STORAGE:

Store in a dry place 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]                                   | 1000                     |  |  |
| Weight with packaging [g]                        | 1200                     |  |  |
| Spool weight [g]                                 | Cardboard core: 30       |  |  |
| Spool dimensions [mm]<br>( ø / height / hole ø ) | Cardboard core: 99/57/94 |  |  |
| Box dimensions [mm]                              | 220/210/65               |  |  |

## **RECOMMENDED PRINTING PARAMETERS**

| PARAMETER                | VALUE                                        |  |
|--------------------------|----------------------------------------------|--|
| Print temperature[°C]    | 240-270                                      |  |
| Bed temperature [°C]     | 70-90                                        |  |
| Cooling [%]              | 0-40*                                        |  |
| Closed chamber           | Not required                                 |  |
| Drying conditions [°C/h] | 70/6-8, drying required before each printing |  |

\*depending on fan capacity

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### PHYSICAL PARAMETERS OF THE MATERIAL

| Parameter                       | Value      | Unit              | Test method         |
|---------------------------------|------------|-------------------|---------------------|
| Density                         | 1,25 -1,29 | g/cm <sup>3</sup> | -                   |
| Flexural strength at yield      | 90         | MPa               | ASTM D790           |
| Elongation at break             | 199        | %                 | ASTM D638           |
| Flexural modulus                | 2495       | MPa               | ASTM D790           |
| Izod impact strength (notched)  | 24         | J/m               | ASTM D256           |
| Glass Transition Temperature Tg | 100        | °C                | ASTM D7426          |
| HDT B                           | 85         | °C                | ASTM D648, 0,455MPa |
| Flame rating                    | В          | -                 | PN-EN 13501         |
| Certificates                    | EFSA, FDA  | -                 |                     |

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 PET-G HT 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. Additional documents, certificates and detailed technical information can be provided on special request.

