

TECHNICAL DATA SHEET

PETG/PTFE

MATERIAL PROPERTIES

| Density | 1.32 g/cm ³ | ISO 1183 |
|--|------------------------|-------------|
| Mechanical properties | | |
| Charpy impact strength* | | |
| unnotched (at 23°C) | NB kJ/m² | ISO 179-1eU |
| notched (at 23°C) | 6 kJ/m² | ISO 179-1eA |
| Tensile Elongation* | | |
| At yield | 3.70% | ISO 527 (1) |
| At break | >100% | ISO 527 (1) |
| Tensile Strength* | | |
| At yield | 40 MPa | ISO 527 (1) |
| At break | 25 MPa | ISO 527 (1) |
| Elastic modulus tensile* (speed 1mm/min) | 1850 MPa | ISO 527 (1) |
| Thermal properties | | |
| VICAT Softening point | 70°C | ISO 306 |

^{*}injection moulding

GUIDELINE FOR PRINT SETTINGS*

| Nozzle temperature | 230-255°C | |
|-------------------------|----------------|--|
| Bed temperature | 0°08-00 | |
| Active cooling fan | 75-100% | |
| Layer height** | 0.05 - 0.30 mm | |
| Shell thickness** | 0.40 – 2.70 mm | |
| Print speed** | 30-70 mm/s | |
| Closed chamber | not necessary | |
| Dry box | not necessary | |
| Ruby or hardened nozzle | not necessary | |

^{*} settings are based on a 0,4 mm nozzle.

Disclaimer

The product- and technical data provided in this datasheet is correct to the best of Spectrum Group Sp. z o.o. knowledge and are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary according to printing conditions, model complexity, environmental conditions, etc. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications. Spectrum Group Sp. z o.o. shall not be made liable for any damage, injury or loss induced from the use of Spectum Group Sp. z o.o. materials in any particular application.

DESCRIPTION

As the basis for the material, we used PETG, well-known for its excellent mechanical properties, supplemented by adding 10% PTFE, commonly known as Teflon, with self-lubricating properties. Thanks to the meticulous selection of components while reducing the coefficient of friction, the filament retains the ease of printing, interlayer adhesion, impact strength and thermal properties typical of PETG.

FEAUTURES

- 10% PTFE content
- reduced coefficient of friction in comparison to conventional PETG
- thermal resistance up to 70°C
- · ease of printing
- · good chemical resistance
- perfect bonding of the layers

STORAGE AND SHELF LIFE

Filament should be stored in a dry room at room temperature. Recommended storage temperature is ca. 18-25°C (64.4-77.0°F). Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of 24 months.



SUPPORT

If you have any questions or experience any issues, please do not hesitate to contact us at support@spectrumfilaments.com



^{**} depending on the geometrical complexity