

PP

MATERIAL PROPERTIES

Physical

Density	0.9 g/cm ³
Shore Hardness	50D

Mechanical

Tensile Stress	12 Mpa
Tensile Strength at Yield	16 Mpa
Tensile Strength at Break	26 Mpa
Tensile Stress at 100%	11 MPa
Elongation at Yield	20%
Elongation at Break	637%
Flexural Modulus	400 Mpa
Tear Strength (Die C)	127 kN/m

Thermal properties

VICAT - Softening point	103 °C
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GUIDELINE FOR PRINT SETTINGS*

Nozzle temperature	245-280°C
Bed temperature	80-100°C
Recommended printing speed	30-120 mm/s
Cooling	0-50%
Density	0.9 g/cm ³
Closed chamber for printing	recommended
Dry box recommended	No
Ruby or hardened nozzle recommended	No
Surface finish	semi-matte
Adhesive	not necessary (3)

* depending on the geometrical complexity

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 Spectrum Group Sp. z o.o. materials in any particular application.

DESCRIPTION

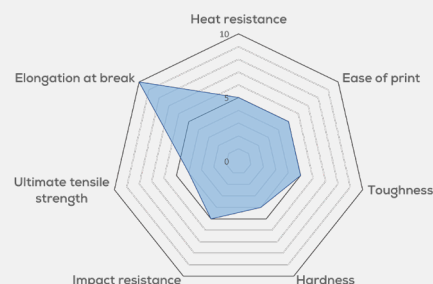
Spectrum PP is a modern polypropylene filament that combines low density, high flexibility, and excellent chemical and mechanical resistance. It is one of the lightest materials used in 3D printing – with a density of just 0.9 g/cm³, printed parts are exceptionally lightweight, yet durable and resistant to mechanical damage. Thanks to its optimized formulation, Spectrum PP ensures superb interlayer adhesion, minimal shrinkage, and a stable, predictable printing process, even on standard desktop 3D printers.

FEAUTURES

- Extremely low density – 0.9 g/cm³
- Elongation at break up to 600%
- Very low moisture absorption
- Outstanding resistance to wear and abrasion
- Watertight printing possible even with single-wall prints
- Food contact compliant
- Dishwasher and microwave safe
- Fully recyclable

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