

ecoPET 9021

MATERIAL PROPERTIES

Density	1.36 g/cm ³	ISO 1183
Water absorption (23°C / 24h)	<0,3%	ISO 62
Mechanical properties (at 23°C)		
Tensile Strength*	55 MPa	ISO 527
Elongation @Fmax.*	2,20%	ISO 527
Tenisle modulus (dry, @1 mm/min)	3 GPa	ISO 527
Flexural Strength**	75 MPa	ISO 178
Flexural elongation @Fmax.**	2,40%	ISO 178
Flexural modulus (dry, @2 mm/min)	3 GPa	ISO 178
Impact strength, dry	28kJ/m ²	ISO 179 1eU
Thermal properties		
Service temperature	125°C	ISO 3167 A

* (dry, @ 50 mm/min)

** (dry, @ 10 mm/min)

GUIDELINE FOR PRINT SETTINGS*

Nozzle temperature	240-270°C
Bed temperature	≥ 50°C
Active cooling fan	50-85%
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.

** 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

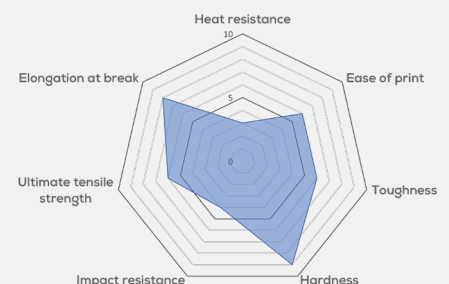
Spectrum ecoPET 9021 is another polyester technical material available in our range. Unlike the more widely used PETG in 3D printing, it is based on a non-glycol-modified variant of PET retaining more than 90% recycled content in its composition. ecoPET 9021 is an eco-friendly and east to print filament. Its advantages over classic PETG are not only its impressive thermal resistance and low water absorption but also its higher tensile strength and rigidity.

FEAUTURES

- 90% recycled content
- tensile strength increased by 20% compared to conventional PETG
- rigidity increased by 50% compared to conventional PETG
- good chemical resistance
- high surface quality after printing
- good impact strength
- 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