

azurefilm

PETG Hyper Speed

TECHNICAL DATA SHEET · REV 06.26 · AF-TDS-PETG

Ø 1.75 ± 0.02 mm

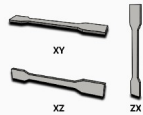
DESCRIPTION

PETG has excellent properties and is one of the most popular filaments. Its structure makes it solid, temperature-resistant (up to 80 °C) and durable, while staying very easy to print. It suits everything from decorations, tools and prosthetics to mechanical products and robotics.

KEY BENEFITS

- Easy to print
- Durable
- Heat-resistant to 80 °C
- Solid & rigid
- Chemical resistant
- Great for functional parts

MECHANICAL PROPERTIES



BUILD ORIENTATION KEY

Each tensile bar was printed flat (XY), on its side (XZ) or upright (ZX). The columns below report each build orientation's measured values —ZX (across layers) is the weakest axis.

PROPERTY	STANDARD	XY	XZ	ZX	UNIT
Tensile strength	ISO 527-2	56.7	59.2	38.4	MPa
Yield strength	ISO 527-2	37.5	38.2	/	MPa
Tensile modulus	ISO 527-2	2100	2200	2100	MPa
Strain at yield	ISO 527-2	8.7	4.3	2.3	%
Flexural strength	ISO 178	82.3	87.4	64.0	MPa
Flexural modulus	ISO 178	2200	2300	2200	MPa
TEST SPECIMENS	Specimens 3D-printed	Infill 100%	Shells 2	Layer height 0.2 mm	

PRINTING RECOMMENDATIONS

Printing temp.	250 °C
Bed temp.	65 °C
Chamber temp.	40 °C
Recommended speed	≤300 mm/s
Max printing speed	≤1150 mm/s
Retraction	0.8 mm
Cooling	40 %

PHYSICAL & THERMAL

Specific gravity	ISO 1133	1.29 g/cc
Melting temp.	ISO 294	180 –250 °C
Heat deflection temp.	ISO 75	73 °C

HANDLING, STORAGE & THERMAL

Max flow rate	85 mm ³ /s	Max-flow test printer	FLsun T1 Pro
Vicat softening temp.	78 °C	Glass transition temp.	80 °C
Drying temp.	55 °C	Drying time	4–6 h
Enclosed printer	Optional	Multi-material compatibility	Compatible

TIPS & TRICKS

- **Dry before high-speed printing**
Dry at 55 °C for 4-6 h; wet PETG strings and weakens surfaces.
- **Store and print dry when possible**
PETG absorbs moisture quickly after opening.
- **Use a release layer on sticky beds**
Glue stick can protect PEI/glass from PETG over-bonding.
- **Keep walls quality-focused**
Let infill run faster while visible walls stay moderate for cleaner surfaces.
- **Pastel, Skin and Neon use this data**
These variants are grouped under PETG Hyper Speed.
- **Recommended print speed**
Use ≤ 300 mm/s for normal prints; Max Printing Speed is the tested ceiling.

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