Technical Data Sheet

Product name: PETG

Version: 1.0

Date: 07.2024

Dimensions

Description	Typical value	Test method
1,75 mm	± 0.05 mm	± 0.05 mm
2,85 mm	± 0,10 mm	± 0,10 mm

MATERIAL PROPERTIES

Description	Typical value	Test method
Density	1.27 g/cm³	ISO 1183,GB/T 1033
Meltindex（MFR）	4.86 g/10min （230 °C/2.16kg）	ISO 1133,GB/T 3682
Melting temperature	225 °C	DSC,10°C/min
Vicatsoftening temperature	77 °C	ISO306,GB/T1633
Heat deflection temperature	68.4 °C	ISO 75 0.45MPa
Tensile strength at Yield	44 MPa	ISO 527, GB/T 1040
Elongation at Break	8.2 %	ISO 527, GB/T 1040

Flexural Modulus	2158 MPa	ISO 527, GB/T 9341
Flexural strength	79 MPa	ISO 178, GB/T 9341
Impact strength	4.2 kJ/m²	ISO 179, GB/T 1043
Layer Adhesion (Impact Strength - Z)	2.8 kJ/m²	ISO 179, GB/T 1043
Moisture absorption	0.4%	ISO 62 23℃，50% RH

GUIDELINE FOR PRINT SETTINGS

Description	**Typical value**
Printing temperature	230-260°C
Build Plate Compatibility	BuildTak®,Glass,BlueTape,PEI
Bed Temperature	70-90°C (Glue Recommended)
Cooling fan	10-40%
Drying Settings	60-65°C，4-8 h
Printing speed	<300 mm/s
AMS Compatibility	YES
Raftseparationdistance	2-4mm
Retractionspeed	30-45mm/s
Hotend Compatibility	0.2-0.8mm nozzle,copper,hardened steel.
Environmentaltemperature	25°C-50°C

Packaging:

All spools are sealed and packed with silica gel to avoid humidity.

Additional info:

The typical values presented in this data sheet are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End- use performance of printed parts depends not only on materials, but also on part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/ recycling practices of R3D materials for the intended application. R3D makes no warranty of any kind, unless announced separately, to the fitness for any use or application. R3D shall not be made liable for any damage, injury or loss induced from the use of R3D materials in any application.

Storage: Cool and dry (15-25˚C) and away from UV light. This enhances the shelf life significantly.