tonerplastics

TPU 3D Filament Data Sheet

Thermoplastic Polyurethane (TPU)

TPU is an highly malleable elastomer which be used to create prints with high toughness while retaining superb flexibility. TPU also has a high resistance to abrasion. For the best results a direct drive extruder system is recommended, however use of Bowden style extruders is still possible. TPU will adhere to most bed types without any adhesives and a cooling fan is highly recommended.

Mechanical Properties		Test Method
Tensile Modulus, PSI	1130	DIN 53504
Yield Strength, PSI	8010	DIN 53505
Tensile Elongation, %	580.0	DIN 53506
Shore Hardness, A	90	DIN 53505
Material Production Specifications		
Nominal Outer Diameter, mm	1.75/2.88	-
OD Tolerance, mm	±0.05	-
Ovality Spec [1]	< 0.001	-

Applications

- Impact resistant casings (i.e. cellphone case)
- General purpose 3D printing
- Applications where high abrasive resistance is needed

Recommended Printer Settings

- Extruder Temperature: 220-240 °C
- Printing Speed: 15-30 mm/s
- Bed Temperature: Room Temp to 40°C
- Bed Adhesion: None Required

Additional Information

- Standard Sizes Available: 1.75/2.88mm
- Custom packaging methods available upon request
- Spool Weight: 1kg., 1lb., 5lb., and 10lb
- All filaments are sealed with desiccants

Regulatory Compliance

- RoHS
- Toy Safe
- REACH

Disclaimer:

The above information is provided in good faith. It is solely the customer's responsibility to determine if the product and information in this document are appropriate for the customer's end use. Customers are always advised to consult their 3D printer manufacturer before using Toner Plastic's filaments.