

# TECH-G (PetG)

*Glycol modified Polyethylene terephthalate - high strength*

TECH-G was specifically developed to have high strength and limited elongation. It is perfect for the development and design industry to easily 3D print parts that offer a higher tensile strength with enough elongation so as to be truly useful in functional testing.

| Mechanical Properties     | Standard | Value | Unit |
|---------------------------|----------|-------|------|
| Ultimate Tensile Strength |          | 40.67 | MPa  |
| Tensile Modulus           |          |       | MPa  |
| Elongation at Break       |          | 3     | %    |
| Flexural Strength         |          |       | MPa  |
| Flexural Modulus          |          |       | MPa  |
| Hardness Shore            | Standard | Value | Unit |
| Hardness                  |          |       |      |

| Thermal Properties       | Standard | Value | Unit              |
|--------------------------|----------|-------|-------------------|
| HDT @ 0.45 MPa           |          |       | °C                |
| Glass Transition Temp    |          | 77    | °C                |
| Physical Properties      | Standard | Value | Unit              |
| Minimum Part Density     |          |       | g/cm <sup>3</sup> |
| Certifications and Tests | Standard | Value | Unit              |
| Flammability (UL 94)     |          |       |                   |
| USP Class VI Certified   |          |       |                   |

## Characteristics

- Superior durability
- High strength with limited elongation
- Good wear resistance
- Low warp and shrink
- Works with breakaway and soluble support
- Non-toxic
- Low melting point, compatible with many support materials
- Easy to print
- FDA Compliant\*

## Applications

- Design and architectural use
- Functional prototypes and testing
- Precision go-no-go gauges, fixtures and stops
- "Soft jaw" holding
- Jigs & Fixtures
- Robotic assemblies
- Prosthetics
- Living Hinges

## Considerations

- Not suitable for high temperature applications
- Poor elongation, brittle.
- Stringing can occur once material absorbs moisture.

**Printing Skill & Experience:**  Beginner  Intermediate  Advanced  Expert

- Needs to be protected from moisture during printing. It is recommended to use an MMS, polybox, or print dry to feed filament to the printer while printing.

## Printer Compatibility

|   |   |                                |                                  |
|---|---|--------------------------------|----------------------------------|
| <input checked="" type="checkbox"/> 3ntr A2v4 | <input checked="" type="checkbox"/> 3ntr A4v4 | <input type="checkbox"/> EVO-T | <input type="checkbox"/> EVO22-T |
|---|---|--------------------------------|----------------------------------|

Available colors from [TRAK](#): Black, Clear

Available colors from [Plural AM](#): Black, Clear

\*See [Safety Data Sheet](#) for more information on FDA Compliance.