

## 3D Print With FiberGlass!

Glass Filled PLA 3D printer filament is a first-of-its-kind engineering-grade filament that can be used on any machine capable of printing standard PLA. Glass Filled PLA filament offers similar benefits of standard PLA such as a very low warp, low odor, and no special extruder or heated bed needed. But the power of its composite make-up allows it to be stronger, tougher and more flexible. In a comparison to parts 3D printed in standard PLA, Glass Filled PLA is:



- 1.4 times stronger than PLA at 57 MPa of max tensile strength.
- 1.3 times tougher than PLA with 34 J/m of Impact Toughness.
- 1.9 times more flexible than PLA with a tensile elongation of 3.4% before failure.

Glass Filled PLA is an effort to advance engineered and practical-use 3D printed parts and components, but also to simply offer to users of PLA a product far improved.

### Print Settings

Glass Filled PLA prints well at 190-210 C. These are general starting points for Glass Filled PLA, actual temperatures will vary from one printer to another. A heated bed is not necessary, though if you have one, set it to 40 C.

### Filament Information

**Quality:** All 3D-Fuel 3D printer filament is manufactured in our own production facility located in Fargo, North Dakota or in Merville, Ireland (depending on customer location). We have complete control over the manufacturing process and are able to ensure consistent quality for every spool. Learn more about 3D-Fuel USA filament quality.

**Diameter Tolerance:** Variable diameter can cause big problems in your 3D printer. We use a multi-axis laser measurement system to control our filament diameter and ovality in real time during production. Every spool has the diameter and ovality measurements listed right on the box.

**Packing Information:** 500g (1.1lbs) of Glass-Filled plastic filament arrives on an easy-to-use plastic reel and is vacuum sealed with a desiccant packet to keep out any moisture.

**Test Printing:** The 3D-Fuel test lab features multiple brands of 3D printers including MakerBot, LulzBot, FlashForge, and more. We 3D print what we manufacture to ensure that our filament provides the absolute best quality possible.