

3D Printing w/ Pro PLA™!

Pro PLA has higher impact strength than ABS and PLA with a heat resistance rivaling that of ABS! Available in 1.75mm and 2.85mm diameter, Pro PLA will help your work look and perform amazingly. Anneal your design after printing for even better heat resistance. (See bottom right.) Industrial Gray available in 4KG. All colors available in 1KG.

Pro PLA is engineered and designed specifically for 3D printing. Pro PLA was designed with the high impact strength needed in industrial applications to meet the growing demand for a material with the properties of ABS, but the printability of PLA. Annealed Pro PLA displays impact strength levels at 1.7 times that of standard PLA, but the new Pro PLA boasts 4.3 times the impact strength of standard PLA.

Even before post-processing, Pro PLA exhibits significantly higher impact strength than ABS.

Print Settings

Pro PLA™ prints well at 210°-240°C (varies by printer). Your bed may be 0°-60°C. Bed surface recommendations are (1) bare acrylic, (2) blue painters tape + hairspray, (3) glass + hairspray, (4) Build-Tak or similar bed surface, or (5) PEI with heated bed @ 45°-60°C. Printing speed should be 40-100 mm/s. Include rafts and supports in your settings for curved prints. Print in an area with superb ventilation or a cooling fan that targets airflow directly on the print.

Filament Information

Quality: All of our filament is manufactured in our own plants (Fargo, North Dakota and Moville, Ireland). We completely control the manufacturing process allowing us to ensure consistent quality for every spool.

Diameter Tolerance: Filament with a fluctuating diameter causes big problems. We use a multi-axis laser to control our ovality and diameter. Every spool has those real-time measurements *listed right on the box!*

Packing Information: Each spool of Pro PLA arrives on a durable plastic reel vacuum sealed with a desiccant packet to keep out moisture.

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



Annealing (Heat Treating) Recommendation:

1. Preheat oven or toaster oven to 176°-266°F (80°-130°C).
2. Place object on room temperature baking sheet.
3. Place baking sheet in oven.
4. Wait 30-60 minutes. You may see a change to a milky, matte, or opaque color.
5. Turn oven off.
6. Wait for oven to cool before removing print.

This should achieve the maximum strength for your print by increasing crystallization while also increasing heat deflection temperature. Shrinking or warping may occur depending on object geometry.