



PolyMax™ PLA 3D Printing Filament

Product Information Sheet

1. Technical Specifications

Color	True White (more colors available upon request)
Average filament diameter	1.75 or 3 mm
Standard deviation of diameter	< ±0.05 mm
Printing temperature range	180 ~ 240 °C
Recommended printing temperatures ¹	1.75 mm: 185 ~ 200 °C (with HBP ²) 200 ~ 230 °C (without HBP) 3 mm: 200 ~ 230 °C
Recommended HBP (if equipped) temperature	60 ~ 70 °C
Recommended printing speed	40 – 120 mm/s

2. User Instructions

- PolyMax™ PLA 3D printing filament is compatible with most desktop FDM/FFF printers including the MakerBot Replicator series, Ultimaker, Afinia/Up!Plus, MakerGear M2, the RepRap series, and many more. It is optimized specifically for printing stability. It shares the same printing quality and stability as PolyPlus™ PLA, and can be used under identical conditions.
- PolyMax™ PLA exhibits minimal heat expansion and can be used reliably on many “ABS-only” printers such as MakerBot Replicator 2X; produces excellent results with dual-extrusion printing.
- PolyMax™ PLA exhibits excellent mechanical properties. The impact strength of parts printed using PolyMax™ PLA is 8-9 times that of regular PLA-printed parts and 20% higher than ABS-printed parts . Refer to the Figures for more details. It is an ideal replacement for ABS.
- The heart-shaped filament clip is provided to prevent the unraveling of the filament when it is not being used; make sure to remove the clip from the spool before loading the filament to your printer.
- Store unused PolyMax™ PLA filament in the provided resealable bag with the desiccant pack to prevent moisture absorption during storage.

1. The actual printing temperature may also depend on the extruder type and printing speed

2. HBP = heated build plate

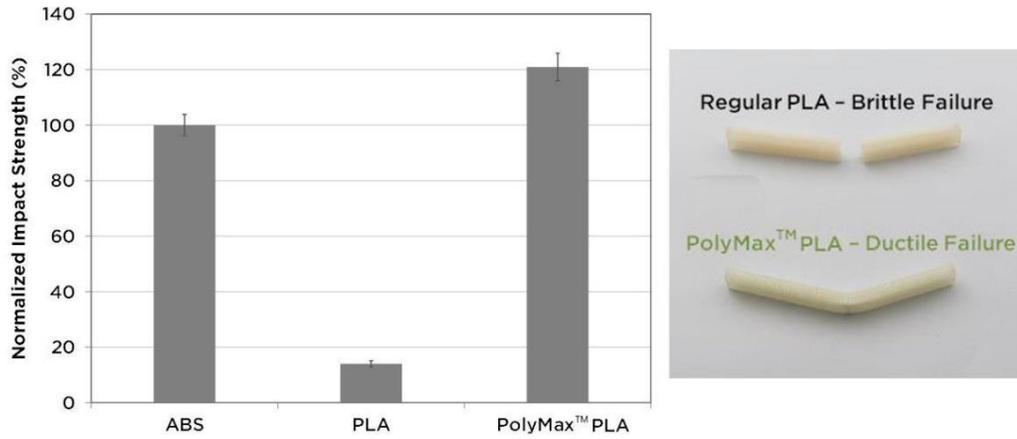


Figure 1.

Left: comparison of impact strength of printed parts from ABS, PLA and PolyMax™ PLA.

Right: The difference of failure modes between parts printed from regular PLA (brittle failure) and PolyMax™ PLA (ductile failure).

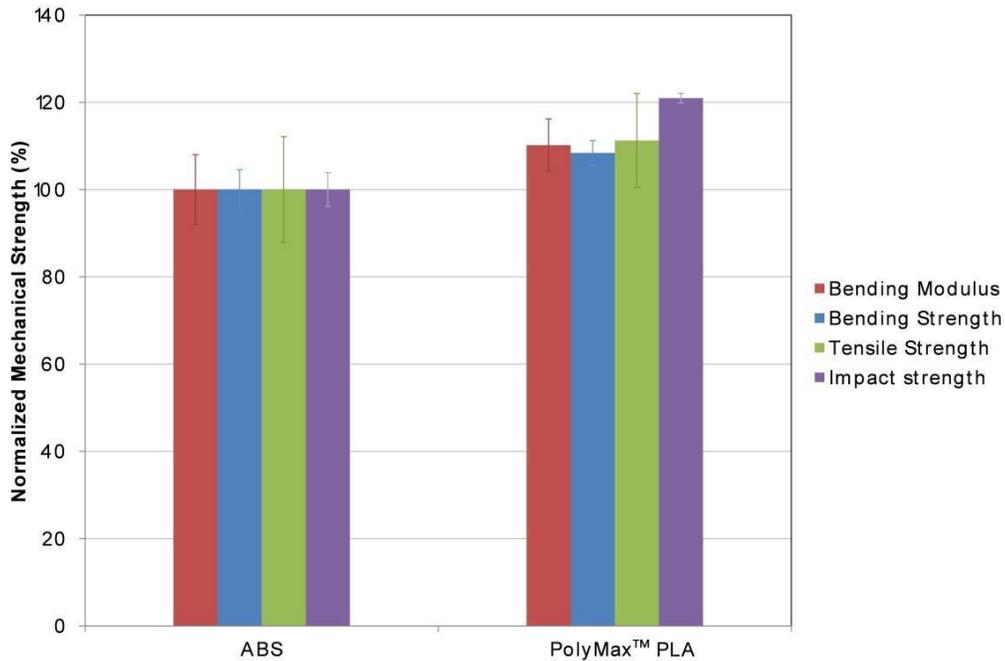


Figure 2.

Comparison of mechanical properties between parts printed from ABS and PolyMax™ PLA.

3. Contact Information

For more information, please visit www.polymakr.com or email support@polymakr.com

For sales in the U.S.A., contact Octave Systems Inc.

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