

Professional Production

All 3D Fuel filaments are produced in the Solaplast production facility located in Meridian, Mississippi. We source all of the finest raw materials, including resins, pigments and additives in the making of our 3D Fuel filament, so we can ensure the most consistent and highest quality product for every order.

Material Science

3D Fuel is a new joint-venture with ALGIX, a distinguished leader in compounding and additives for the bioplastics industry. Our know-how, scientific network and strategic partnerships are driving material innovations and quality. You can expect 3D Fuel to continually develop innovative new materials focused on performance, sustainability and quality.

Consistent Diameter and Roundness

Our filament extrusion system uses dual axis laser measurement systems to check the diameter and roundness during production. This helps us guarantee that each spool of 3D Fuel filament is produced within a targeted tolerance range. We can guarantee 0.03mm +/- on our 1.75mm 3D Fuel filament, which means you can rest assured that your printer is extruding the exact amount of material without causing jams, clogs and headaches.

In-house R&D and laboratory testing

The 3D Fuel testing lab features popular 3D printers. We're continuously testing on these 3D printers to keep checking the quality of the materials we produce and to develop exciting new materials for the maker community.



Professional Packaging

Within minutes of production, every spool of 3D Fuel filament is vacuumed sealed with a moisture absorbent desiccant and humidity indicator enclosed. 3D Fuel filament is ready right out of the box for 3D printing when you receive your order.

General Information

If you're new to 3D printing, 3D Fuel PLA filament is a good material to start with, because it is easy to use and performs well on most prints. 3D Fuel PLA filament is a nontoxic resin made of lactic acid derived from corn or sugar cane and has a slightly sweet smell when processed. Store 3D Fuel PLA filament in a cool, dry place as it can absorb moisture from air, and long-term exposure to humidity can compromise filament quality and performance. Be sure your build plate is level, clean and oil-free before printing. 3D Fuel PLA filament adheres well to acrylic and to painter's tape, and does not require a heated build plate like ABS filament

Product Specifications

Material: 3D Fuel PLA – Natureworks 3052D
Diameter Tolerance: ± 0.03 mm
Density: 1.24 g·cm⁻³
Glass Transition Temperature: 55-60 C
Melt Flow Rate: 14 g/10 min (210C, 2.16 KG)

Product Dimensions

Spool Diameter: 20.3 cm (8 inches)
Spool Width: 7.3 cm (2 7/8 inches)
Spool Hub Hole: 5 cm (2 inches)
Filament Diameter: 1.75 mm (0.07 inches)



Printing Tips

- This filament will run best at an extrusion temperature of 185 – 200 C.
- It is recommended to use AquaNet™ hair spray or painter's tape on the build plate to ensure the first layer of the print sticks to the plate.
- Clean the base plate after each day of printing.
- For more stability and a higher quality print:
 - Reduce speed of extruder to 30-60mm/second
 - Increase infill to 30%
 - Reduce layer height to 0.10mm
- For prints with curvatures, it is recommended to turn on rafts and supports in your settings.
- Print in an area with moderate airflow.
- Clean nozzle after every use.