Thanks for your interest in testing the Recreator3D's Converted PET Plastic Bottle Filament. We hope that this gives you a great idea of what this filament can do for your production needs and what owning a Recreator3D can do for you!

We've included this sheet with your Filament Samples to easily guide you along in your first time use of this experimental filament.

This filament is drawn and formed through a heated source via a Pull drawn method known as, Pultrusion: https://en.wikipedia.org/wiki/Pultrusion

This Filament is actually similar to a straw, with a hollow inside. The outer diameter is formed through the nozzle (any size can be drilled), ours is around 1.75mm. With the Expansion of this material as well the nature of it being hollow…this diameter can be within an “ish” variant.

With the above in mind – We’ve found increasing our Favorite Slicer’s Flow Rate to 130% has allowed us to bypass this variant.

Please use the filament wisely. We suggest the smaller amounts be used first among your initial calibrations. Once you’re happy with your settings – Try something with the larger amounts.

We’ve found that this filament needs to be cooled - With no cooling the filament can transition to a crystallized state causing some clogging.

If you find your filament is not properly bonding – You can increase your Flow Rates within your Slicer. We’ve found using the following Slicer Settings has allowed for us to print successfully. If you find this not to be the case, please reach out to us via our Facebook Group Account.

We’d also love to know about what settings worked for you and what you printed, please Join the Group and Share your finished prints!

The Recreator3D - Plastic Bottle to PET Filament Converter

Recreator3D PET Filament from Soda Bottles Suggested Slicer Settings Using CURA 4.8 and Ender 3 Clone

- Layer Height.....0.2mm
- Nozzle Temp.....260
- Bed Temp.....70
- Flow.....130%
- Initial Layer Flow.....130%
- Print Speed 30%
- Fan.....15%
- Retraction.....4.5mm
- Retraction Speed…...40

3DBenchy - The jolly 3D printing torture-test by CreativeTools.se
- Printed with Coca Cola Soda PET Bottle on a Ender 3 Clone with Direct Drive.
STL: https://www.thingiverse.com/thing:763622

Join the fun @ Our User Facebook Group

SCAN TO FACEBOOK @

https://www.facebook.com/groups/recreator3d
Shared Slicer Profiles, STL Files, and Successful Prints!

The Idea is simple!

Strip down PET Recyclable Plastic Bottles, Convert into new usable Filament. Load up your Favorite 3D Printer and Recreate!

Reduce, Reuse, Recreate!

Recent conversation came up about if overall Value is worth the effort, when One could easily make more money from the Redemption Centers and "just buy PETG Filament".

These things are VERY different concepts when you compare USA to EU for example - Here are some numbers I did to compare how Financial Incentive Programs are VERY different in how much money is Given for Plastic Waste to be Recycled - rather than just thrown out.

Beyond this - We have to think how much Carbon Foot-prints in Emissions alone go back into all these item's travel destinations of their life span. We stop this at our Front Doors!

Financial BreakDowns:

USA = $0.05 Cent A 2 Liter Plastic PET#1 Bottle

The PET#1 Return = 25 Grams of Filament when Stripped.

@ $0.20 Cents for 4 Bottles = 100 Grams.
X 10 = 40 Bottles = $2 ($2 USD = €1.68 EUR) for 1000 Grams.

Average PETG is anywhere from $16-$28 USD a Roll for "Professional" Filament depending on Brand.

VS

EUROPE = €0.25 Cent A 2 Liter Plastic PET#1 Bottle

The PET#1 Return = 25 Grams of Filament when Stripped.

@ €1 Euro for 4 Bottles = 100 Grams.
X 10 = 40 Bottles = €10 (€10.00 EUR = $11.88 USD) for 1000 Grams.

Average PETG is anywhere from €13-€24 Euro a Roll for "Professional" Filament depending on Brand.

What are your Area's Financial Incentives to help increase Recycling Efforts?

Do you even have any?

Please share your experience to help expand this outlook.

The Recreator 3D - How To - Build Notes - RECYCLE - PET#1 - Plastic Bottle Pultrusion Unit

Build Video can be found here:

- https://youtu.be/nMYunEgUQ8s

Build Notes and Parts to Buy can be found here:

- http://recreator3d.com/notes

Parts to Print can be found here:

- http://recreator3d.com/parts

Gcode and other software can be found here:

- http://recreator3d.com/software

Operations Manual can be found here:

- http://recreator3d.com/manual

The Recreator 3D's purpose is to Recreate PET #1 Recyclable Plastic Bottles into Usable 3D Filament.

The Smallest, Most Compact, and Portable Pultrusion Kit seen within the community. It's ability to Strip, Reform, Color, and Spool all in one Continuous Pull Cycle. Coming in Under $200, This Community Kit should inspire most Households and Community Team Leaders.

The Recreator 3D, inspired by the XViCO X3S 3D Printers.

It's base structure, a few accessories, and a handful of 3D Printed parts are all that was used.

The Recreator 3D Will be 100% Free As a Community Build.

With the "Pet-Pull" Group from Russia as visual inspiration for using a Pultrusion Method. I wanted to further adapt PET#1 Recycling to be more accessible to every person is even easier.

With this Goal,

We'll reshape our Future's recycling methods;

One bottle at a time!

JRT

Joshua

jrt3d.com

recreator3d.com

recycle.xyz

https://en.wikipedia.org/wiki/Polyethylene_terephthalate

DONATIONS ARE WELCOME!

Scan the QR to Donate and help with Future Projects!

Consider supporting the good work Joshua R. Taylor does by donating or sharing with others who'd like to help.