



rPLA

Recycled
Polylactic Acid

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Background

Polylactic Acid, more commonly known as PLA, is one of the most frequently used materials in 3D printing.

Its popularity comes from its ease of use, organic nature, and relatively strong mechanical properties.

PLA is also inexpensive making it a great entry-level material.

PLA also boasts strong mechanical properties and user-friendly thermal properties that make it easy to print with.

Its prevalence and ease of use makes it a perfect material to regrind and recycle.

For those who prototype often, rPLA is a sustainable solution.

Applications

rPLA is a great material for applications that require rapid prototyping and strong parts.

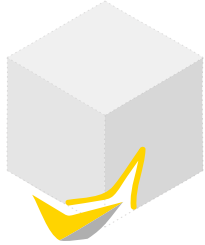
Its ease of use and low cost make it suitable when a part may be frequently reprinted as is the case in prototyping and architecture.

rPLA is easily recycled, proving to be a sustainable solution for rapid prototyping.

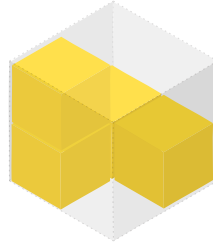
Its strength and ease of use make it suitable for those who need to turn over a lot of strong, functional prototypes.

- > Household Parts
- > Artistic Models
- > Prototyping

Material Properties



Glass Transition
~65 °C



Density
1.25 g/cm³



Extrusion Temperature
180-210 °C

Printer Settings



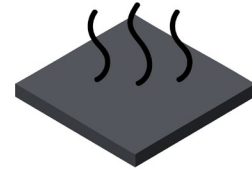
Top Temp Zone
170 °C



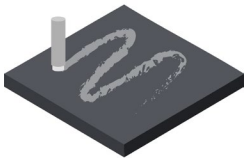
Middle Temp Zone
165 °C



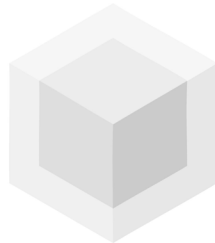
Bottom Temp Zone
155 °C



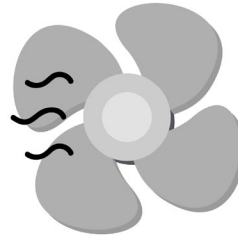
Heated Bed Temperature
60 °C



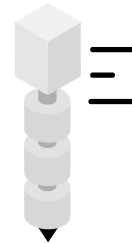
Bed Adhesion
No Adhesive



Enclosure
Do Not Use



Fans
-



Printing Speed
3,600 mm/min

Sustainability

rPLA is created by grinding failed or older PLA prints.

Much like normal PLA, rPLA is made from organic sources and is thus compostable.

Since PLA is difficult to recycle at commercial recycling centers, regrinding PLA into rPLA and reusing it in pellet printers is a more sustainable alternative.

Questions?

Please, do not hesitate to reach out to support@re3d.org via email or visit re3d.org/support if you have any more questions about rPLA.

Want to validate your material?

Would you like to see your material listed as a validated supplier? Our engineers welcome your pellets or reground material! Email us at info@re3d.org for more information.