

LulzBot Filament Testing Report

Manufacturer: Proto-Pasta
Filament Type: Everyday PLA
Tested By: bam
Date: 4/25/16

Ease of use: 5/10

Appearance: 7/10

Color consistency: 10/10

Print temperature Range (C): 190-220/40-60

MELTING RANGE: 50°-180°C,

AUTO-IGNITION TEMPERATURE: 300C-400C

DECOMPOSITION TEMPERATURE: 482F (250C)

Variance in diameter: (2.82-2.84)

Minimum bend radius:

Prints using current Lulzbot profiles/temps: No, it would likely work well with standard PLA slowed down to 60% or with the extrusion temperature bumped up to 210C

General Notes:

- Nice looking spool, same recyclable cardboard as their other filaments
- the filament has a nice matte texture similar to ninjaflex, but the prints look glossy and nice like other PLA
- This PLA does not print well with our standard village or esun PLA settings, either the extrusion temperature needs to be raised or the print speed slowed down.
- It's currently unclear if this filament will be released at all and how many colors there might be.
- The name would likely change before release, as e3d has recently started selling a PLA called everyday PLA as well

Health or environmental risks:

‘This is a polymeric compound. All ingredients are encapsulated by the polymer and present no likelihood of exposure under normal conditions of processing and handling.’

EYES: Solid/dust may cause irritation due to mechanical action. Dust will not be generated under normal use conditions.

SKIN: Filament is not likely to cause irritation. Contact with molten material may cause thermal burns.

BURNS: Molten material will cause thermal burns, avoid contact.

INHALATION: Processing fumes may cause irritation to the respiratory tract, use in well ventilated areas only.

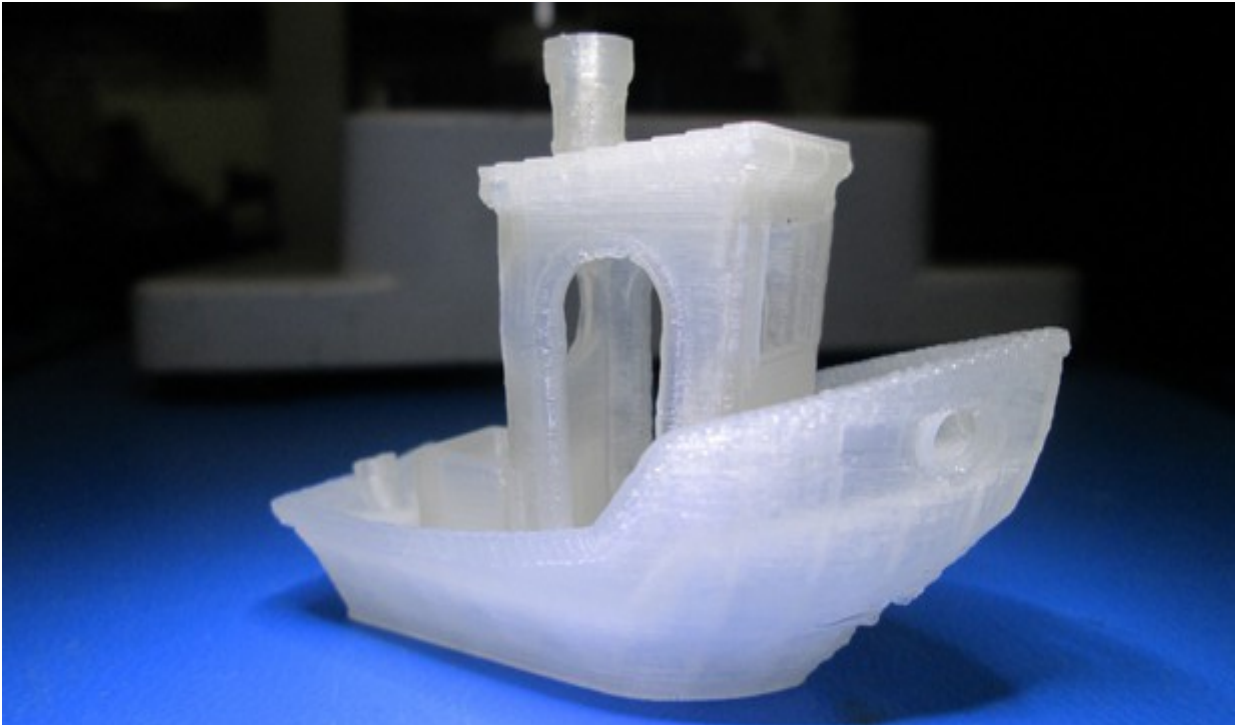
CHRONIC HEALTH HAZARDS: None known for this compound.

Disposal Options:

‘WASTE DISPOSAL METHOD: In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. For recycling, contact local waste disposal centers.’

Recommendation:

Overall this is a very nice PLA, and the sample received has the most consistent thickness of any filament I've ever tested. In order to carry this filament we would need to create unique profiles for it.



ABOVE: Print with standard PLA settings, you can see a noticeable improvement when the minimum layer setting cuts in, slowing down the print.

BELOW: Standard PLA settings with min layer time changed from 20 to 40s.

