2 March 2016

Material Specification Print Sheet

Polyethylene Terephthalate Glycol-modified

PETG

Makergeeks

Pre and Post Processing:

A heated glass build plate is sufficient to get PETG to adhere to the platform. Rectilinear motions on the bottom layer may pull up slightly if the head is too far away.

HAZARDS (rating 1-10)

Releases fumes that are irritating to the respiratory system while printing, print in a well ventilated space.

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Settings to print with

Temp Range: 200-240°C (205°C ideal on MK1)

Recommended flow multiplier: 1.400

Recommended layer size: 0.1-0.3

Build Plate Temp: 70°C

Recommended Fan: 100%

Prime/Unprime:

Steps: 300	Steps: 300
Rate: 10,000	Rate: 10,000
Time (ms): 45	Time (ms): 40
Primes after Tool Change: 1	Primes after Tool Change: 1

How well it handles prints

Overhangs: 30°

Retraction: 3

Circles: 4

Layer change: 5

Fine detail: 3

Curling: 3

Properties of Material

Modulus of Elasticity:

Yield Strength:

Fracture Point:

Modulus of Elasticity in Bending:

All parts done with a ___% infill

Chemical	Water	Vinegar	HCl	Acetone	HF	Sulfuric Acid
Resistance (High/Limited/None)						
Chemical	Aqua Regia	Bleach	Gasoline	Methyl Alcohol	Ethyl Alcohol	NaOH
Resistance (High/Limited/None)						

Images (Left to right, top to bottom): Single walled vase, Artifact/Feature size test, Retraction/Feature size test, arch, top of overhang test, bottom of overhang test.

Overhang: Minimum angle to the horizontal at which layers are relatively unperturbed.

Print handling parameters: 5-optimal, 4-very good, 3-fair, 2-passable, 1-very poor

Chemical Resistance: High-no observable affect after a long period of time, Limited-Slight affects over time (swelling, discoloration, slight softening, etc), None-very severely affected by chemical.

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NOTES:

-A fan for PETG is critically important, as without a fan even a 45 degree angle will fail utterly.