

## FORM 2 & 3 PRINTER Laser Heat Champagne (PT-HE001CP)

### Check:

- Resin tank and optical path are clean
- Shake resin well before using

### Open-Mode (Form2):

Printer at idle

1. Tap touchscreen “Printer” icon
2. Open “Settings” menu
3. Select “Open Mode”
4. Select “ON”

**\*LT tank is required for Form2 printers**

### Cartridge (Form2 & 3):

Refill corresponding cartridge e.g. FormLabs Grey version 4 cartridge. Open air vent, turn cartridge upside down, drip dry through air vent for at least 10 mins to minimize cross contamination, refill, shake well for 2 mins, insert & print.

**Warning: Cross contamination of resins may cause size inaccuracy or properties variation.**

[Open Material Mode for Form 3 generation](#)

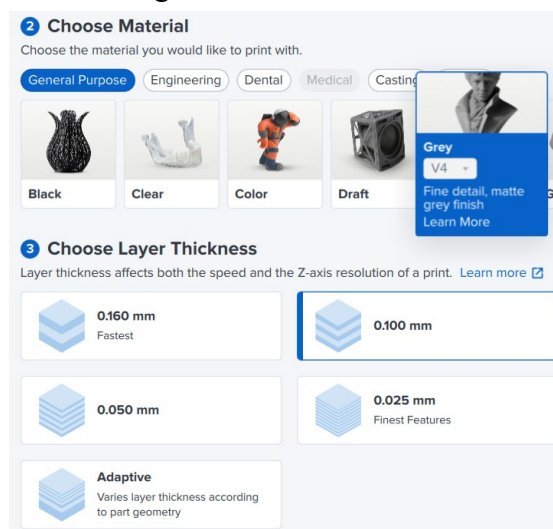
### PreForm Settings:

Select Printer: Form2 or Form3/3+

Material Select: **Grey V4**

Suggest Layer Thickness: 0.1 ~ 0.025 mm

Print Settings: Default



### Washing:

IPA 95%, maximum for up to **3 minutes**, gently shake-off / blow-off excess IPA quickly, set print in a shaded airy place to dry completely before curing.

Extended time in IPA causes deformation. Dried print might be a little tacky to touch.

### Post Curing (Mandatory):

For optimal material performance, two steps post-curing processes are required, **photo curing** plus an additional **thermal curing** in a non-food oven. Several post-curing options are available. Ref. to page 2 and select the option that is best fit for the intended application.

### Storage:

- Keep resin in shaded environment: temperature between 15°C and 26°C
- NOT accessible to children
- Filter used resins before storage

### Note:

- Keep print environment well ventilated.
- Avoid direct contact to skin or eyes. Rinse cautiously with water / soap and water for several minutes if contact to eyes / skin.
- Wear chemically-resistant gloves such as nitrile or neoprene (not latex) when handling.
- DO NOT pour uncured resin down the drain. Abandoned resin can be cured by sunlight before discarding.
- Unless specifically indicated, Heat resin is NOT approved for use with food, drink, or on/in the human body.

### **WARNING:**

Contact with eye and skin may cause irritation and allergic reaction.

## Material Properties Data

Subject printed on Form3 @ 100 µm, Grey V4 setting, oven temp starts from room temperature

1. FormCure at 60 °C / 60 mins
2. FormCure at 80 °C / 120 mins
3. FormCure at 80 °C / 120 mins followed by oven to 160 °C for 180 mins
4. FormCure at 60 °C / 60 mins followed by oven to 160 °C for 90 mins

## Thermal Properties Data

	Photo-cured <sup>1</sup>	Photo-cured <sup>2</sup>	Photo-cured + Thermal-Cured <sup>3</sup>
Heat Deflection Temperature @0.45 MPa (°F/°C)	213.8/101	298.4/148	370.4/188

In accordance with ASTM D648

## Mechanical Properties Data

	Photo-cured <sup>1</sup>	Photo-cured + Thermal-Cured <sup>4</sup>
Tensile (MPa)	65 – 80	65 – 85
Elongation (%)	1 – 3	1 – 2
Impact (J/m)	16 – 27	23 – 29
Hardness (Shore)	86 – 88 D	86 – 88 D
Flexure Strength (MPa)	140 – 160	150 – 180
Flexure Modulus (MPa)	2550 - 2750	2950 – 3100

Properties may vary according to different print geometry, orientation, setting and post-process condition and equipment.