

## MSLA Castable – Cyan (MSP-C001CN)

### Check

- Vat and LCD screen are clean
- Shake well (60 sec) before pouring
- Vat and platform are tightened properly

### Printer Setting Recommendation Chart

Printer	Layer Thickness (µm)	Bottom (Burn-In) Layers	Normal Layer Exposure Time (s)	Bottom Layer Exposure Time (s)	Light-off Delay (s)	Lifting Distance (mm)	Lifting Speed (mm/min)	Retract Speed (mm/min)
Phrozen Shuffle	50	6	12	40	10	6	60	150
Phrozen Shuffle XL	50	6	12	40	15	8	60	150
Phrozen Sonic	50	6	2.5	7	10	6	60	150
Phrozen Sonic Mini	50	6	5	15	10	6	60	150
Phrozen Sonic Mighty 4K	50	6	3.5	12	15	8	60	150
Phrozen Sonic Mighty 8K	50	6	3.8	12	15	8	60	150
Elegoo Mars2 Pro	50	6	3	15	9	5	60	150
Elegoo Mars3 Ultra 4K	30	6	2	12	9	5	60	150
	50	6	2.5	12	9	5	60	150
Elegoo Jupiter	50	6	5.5	30	23	12	60	100
MiiCraft	50	6	1.2	4	-	-	Slow	Slow
Prusa SL1	50	6	12	40	-	-	Slow	Slow
Prusa SL1S	50	6	5.5	25	-	-	Slow	Slow
Anycubic Photon MonoX	50	6	2	15	15	8	1 (mm/s)	2.5 (mm/s)
Peopoly	30	6	4	30	14	7.5	60	80
Phenom Forge	50	6	4.5	30	14	7.5	60	80

Each printer is unique, light intensity varies from printer to printer even though they are the same model and make. Please adjust normal exposure time from our recommended settings  $\pm 2$  ( $\pm 0.2$  for Mono LCD) seconds for your printer and print geometry.

For size calibration, download the stl file:

<https://www.thingiverse.com/thing:1586206>

## Washing

Fresh IPA rinse (95+% concentration) over prints. Do NOT submerge prints in IPA. Blow dry via compressor air immediately after rinse and set print in a shaded airy place to fully dry before casting (approx 60 mins). **Limit IPA contact time to 30 seconds as prolong contact time could cause print deformation.** Color migration (leaking color from prints) of prints are normal.

## No Post-Curing Needed

## Storage

Store resin bottle out of direct sunlight.

Do Not store resin in the vat for more than **2 days** when not in use.

**Note:** Slight pigment settlement is normal. Gently mix remaining resin in resin vat with soft wiper for color evenness.

## Product Features

ApplyLabs Castable Cyan offers high quality, dimensionally accurate 3D Prints and straightforward easy Casting for the Jewellery and Dental Industry.

Main features include:

Low shrinkage (Storage at 25°C for 1 week, <1 vol%)

Low ash

Low expansion during burnout

No need for UV post-curing

No need for dip or spray

**Casting Instruction**

For optimal results, please use investment designs for casting 3D printed resins.

Example: R&R Plasticast, Optima Prestige, Gold Star Resincast or equivalent.

Consider using ‘Sticky Wax’ when attached models to wax, as adhesion between resin and wax is not always very strong. Or consider printing casting sprues in place when appropriate.

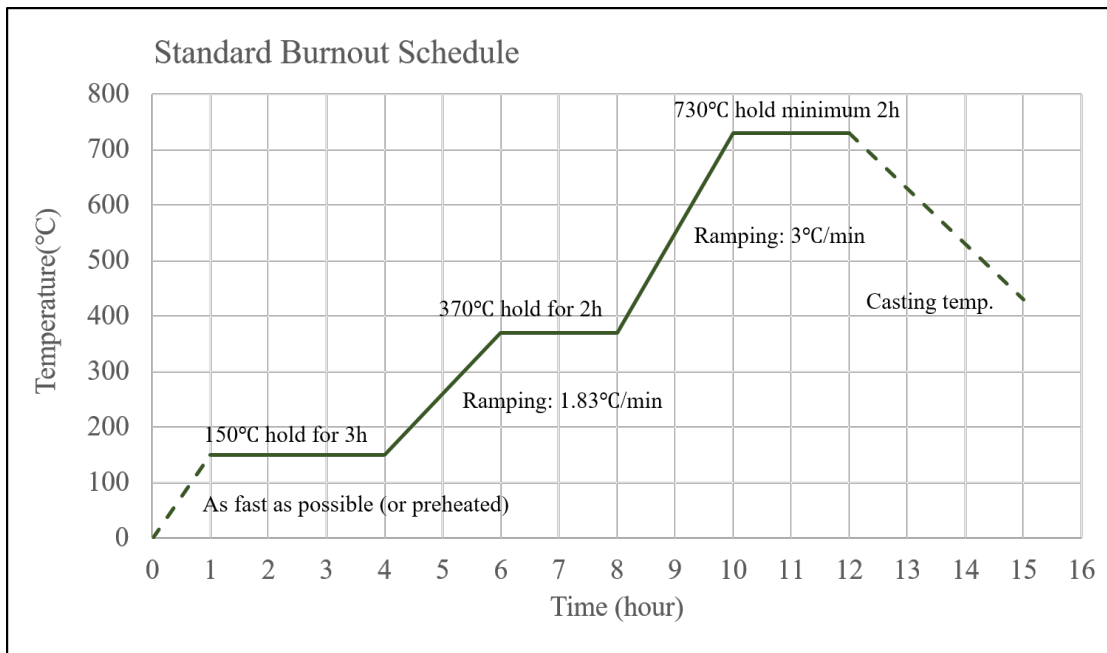
**Burnout Schedule**

Follow the burnout schedule of your investment manufacturer, or the schedule we recommend below and make modifications according to your burnout equipment.

**Standard Burnout Schedule**

Example: Burnout schedule for a 4”x6” vacuum flask using R&R Plasticast mixed at 40:100 ratio.

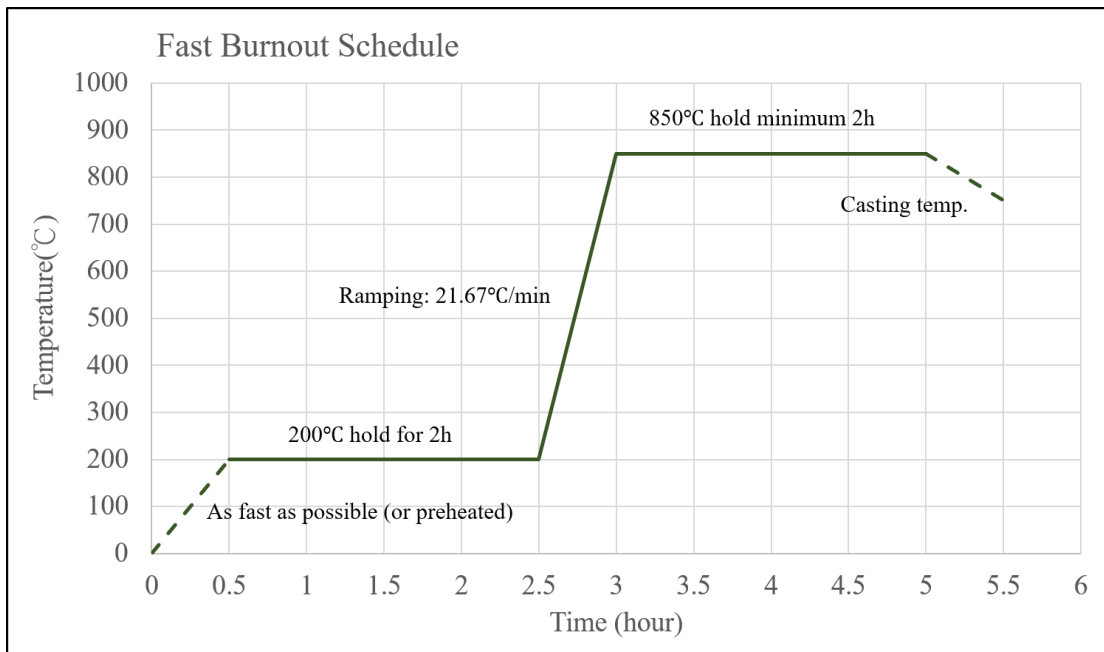
- Start kiln at room temperature or preheated to 150°C (300°F)
- Hold 150°C (300°F) for 3 hours
- Raise temperature to 370°C (700°F) over 2 hours.
- Hold 370°C (700°F) for 2 hours
- Raise temperature to 730°C (1350°F) over 2 hours
- Hold 730°C (1350°F) for 2 hours (for large flask, let sit for 1-2 hours longer)
- Reduce to casting temperature (for example, 430°C (800°F) for sterling silver)
- Hold Casting Temperature for 2 hours
- **Note:** Do Not Exceed Maximum Temperature



## Fast Burnout Schedule

Example: Burnout schedule for a 3"x2.5" flask using YihuiCasting Resin Investment Powder mixed at 38:100 ratio.

- Start kiln at room temperature or preheated to 200°C (392°F)
- Hold 200°C (392°F) for 2 hours (for large flask, let sit for 1-2 hours longer)
- Raise temperature to 850°C (1562°F) over 0.5 hours.
- Hold 850°C (1562°F) for 2 hours (for large flask, let sit for 1-2 hours longer)
- Reduce to casting temperature (for example, 430°C (800°F) for sterling silver)
- Hold Casting Temperature for 2 hours
- **Note:** Do Not Exceed Maximum Temperature





## Gallery:

This project cast in Silicon Bronze using a standard wax burnout schedule with R&R Plasticast 40:100 using an Electric Melter and Kaya Vacuum Casting Machine.

