

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 (select 50um layer thickness for fine structure)

| 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) |
|-----------------------|----------------------|-------------------------|--------------------------------|--------------------------------|---------------------|-----------------------|------------------------|------------------------|
| Shuffle | 50 | 6 | 12 | 40 | 10 | 6 | 60 | 150 |
| Shuffle XL | 50 | 6 | 12 | 40 | 15 | 8 | 60 | 150 |
| Sonic | 50 | 6 | 2.5 | 7 | 10 | 6 | 60 | 150 |
| Sonic Mini | 50 | 6 | 5 | 15 | 10 | 6 | 60 | 150 |
| Sonic Mighty 4K | 50 | 6 | 3.5 | 12 | 15 | 8 | 60 | 150 |
| Elegoo Mars2 Pro | 50 | 6 | 3 | 15 | 9 | 5 | 60 | 150 |
| Elegoo Mars3 Ultra 4K | 50 | 6 | 2.5 | 12 | 9 | 5 | 60 | 150 |
| MiiCraft | 50 | 6 | 1.2 | 4 | - | - | Slow | Slow |
| Prusa SL1 | 50 | 6 | 12 | 40 | - | - | 5 (tilt time) | - |
| Anycubic Photon MonoX | 50 | 6 | 2 | 15 | 15 | 8 | 1 (mm/s) | 2.5 (mm/s) |

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 ± 2 (± 0.5 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.

Filter out all debris in case of failed prints.

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.

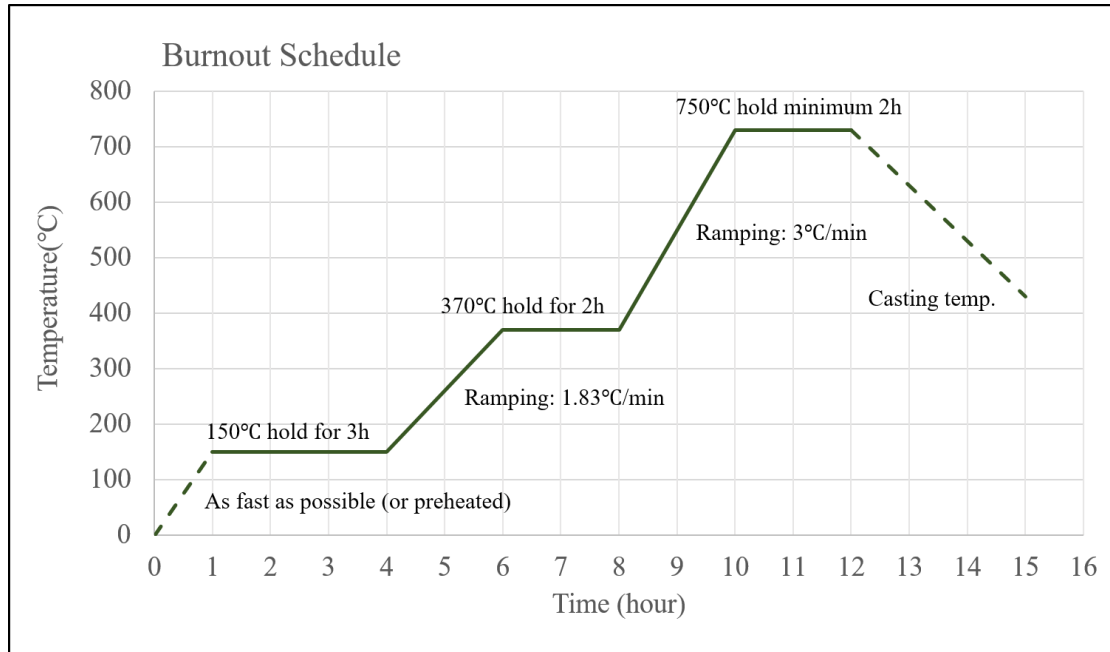
Example: R&R Plasticast, Optima Prestige, Gold Star Resincast or equivalent.

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. Example: Burnout cycle 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



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.

