#### APPLYLABWORK PRINTING TIPS

# MSLA-Modeling – Sand (MMD-R001SD)

#### Check

- Vat and LCD screen are clean
- Shake well before pouring, at least 30 sec
- Vat & platform are fixed properly
- Do Not overfill vat

# **Recommend Setting**

Printer	Layer Thickness (µm)	Burn-in layer count	Burn-in exposure (s)	Normal exposure (s)	Transition Layer Count
Mars 4 DLP Mars 4	50	5	16	2.8	10
DLP	100	5	16	3.8	10
Mighty 8K	50	25	25	2.8	10
Mighty 8K	100	25	25	5	10
M3 Premium M3	50	25	25	2.8	10
Premium	100	25	25	4.8	10

Detail setting of various printers, please refer to ALW <u>LCD/LED Settings Worksheet</u>. Each printer is unique, light intensity varies from printer to printer. Please adjust normal layer exposure time to best fit your printer condition.

For size calibration, please download <u>XYZ</u> caalibration cube stl file.

# **Washing**

95% IPA wash for **5 minutes**, shake-off / blow-off excess IPA, set print in a shaded airy place to dry completely before UV curing. (**extended time in IPA causes deformation**). Dried print might be a little tacky to touch

# Curing

Post-curing for optimal material performance: Light wavelength: 405 nm Total light energy per unit area required on the print: 162,000 mJ/cm<sup>2</sup>

#### Example:

Light power on the print =  $40 \text{mW/cm}^2$ , (higher power per unit area shortens curing time) 162,000 mJ / 30 mW / 60 sec = 90 minutes of curing time.

For common curing chambers, the recommended setting is following:

Post Curing	Temperature	Time	
Chamber	(°C)	(min)	
FormCure	60	30	
(FormLabs)	00	30	
ProCure	30	15	
(Sprintray)	30	13	
Phrozen cure XL		45	
(Phrozen)		43	
Mercury x Cure		30	
(Elegoo)			

# Storage

- Keep resin away from heat & light.
- NOT accessible to children.
- Filter used resin before storage / reprint in the case of fail print.
- Slight pigment settlement is normal. Gently mix remaining resin in resin vat with soft wiper for color evenness.

#### Note:

- Keep print lab well ventilated.
- Rinse thoroughly with if contact to eyes or skin.
- Wear chemically resistant gloves when handling.
- DO NOT pour uncured resin down the drain. Resin can be cured by sunlight before discarding.
- This resin is NOT approved for use with food, or the human body.