

APPLYLABWORK PRINTING TIPS

(Not endorsed by SprintRay)

DLP SG Clear (DSP-SG001CR) MSLA Open Printers

Check: Resin is well shakened, Optical pathways are clean, Resin tank in good condition.

Print Settings:

Examples:

Printer	Layer thickness (mm)	Normal layer exposure time (s)	Bottom layer exposure time (s)
Elegoo Mars 3 Pro	0.1	7	15
Elegoo Saturns	0.1	9	25
Phrozen Mighty 4K	0.1	9	15
Phrozen Sonic 4K 2022	0.1	7.5	12
AnyCubic Mono X 6K	0.1	4.5	15

Ref. to ApplyLabWork [support page](#) and download [MSLA Exposure Setting Profiles](#) for lab tested settings details. Note, each printer is unique, light intensity varies from printer to printer even with the identical model and make, minor adjustment might be necessary.

Note, Do not place supports near the guide sleeve holes or on the intaglio surfaces.

Washing:

Ultrasonic bath, **fresh IPA (95%) 3 mins** max. Blow dry the models with compressed air, let models **sit dry completely, 25 mins minimum**, in a shaded airy location. **Printed parts must be free of IPA before UV post-curing.** Extended wash time and residual IPA (if not dried completely) causes deformation and lower mechanical properties.

UV Post-Curing:

UV post-curing is required.

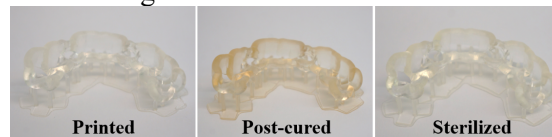
Curing settings:

Post Curing Chamber	Temperature (°C)	Time (min)
FormCure (FormLabs)	60	30
ProCure 1 (SprintRay)	30	15
Phrozen cure XL (Phrozen)	--	45
Mercury × Cure (Elegoo)	--	30

Steam Sterilization:

- Prints must be fully UV post-cured.
- Autoclave: **15 minutes at 121°C / 250°F**. No stacking of models in autoclave. Longer or hotter autoclave cycles is not needed.

Color change:



- Allow the print to cool to room temperature. Avoid forces to the models during cooling.

Storage:

Keep the resin in the original bottle, room temperature (15-26°C / 59-79°F) in a dry and dark area. Filter out all debris in the case of fail print jobs.

DLP SG Clear (DSP-SG001CR) SprintRay (Pro 95 55; Pro S 95 55)

Checks: SG Resin is well shaken, Optical pathways are clean, Resin tank in good condition.

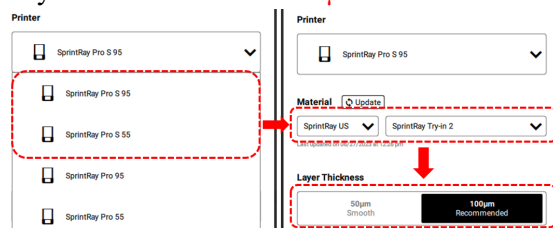
RayWare: version 2.9.2 and later

Printer Settings:

Pro S (95 & 55)

Material: **SprintRay US** → **Try-In 2**

Layer Thickness : **50/100 µm**

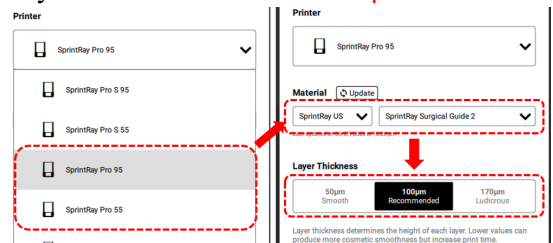


Or

Pro (95 & 55)

Material: **SprintRay US** → **SprintRay Surgical Guide 2**

Layer Thickness : **50/100/170 µm**



For detail calibration for resin can refer to [Dimension](#) and [Tolerance](#).

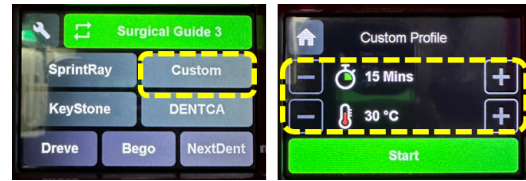
Best fitting, avoid placing supports near the guide sleeve holes and on the intaglio surfaces. Inspect support locations to add or remove supports as needed.

Washing:

Ultrasonic bath, **fresh IPA (95%) 3 mins** max. Blow dry the models with compressed air, let models **sit dry completely, 25 mins minimum**, in a shaded airy location. **Printed parts must be free of IPA before UV post-curing**. Extended wash time and residual IPA (if not dried completely) causes deformation and lower mechanical properties.

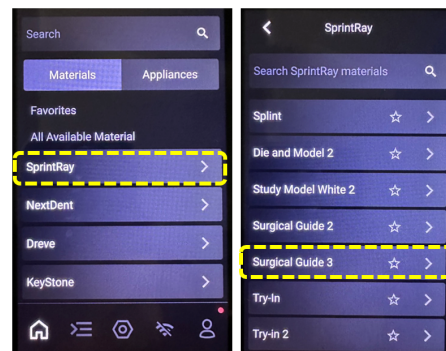
Post-Curing:

- Pro Cure 1** (version 1.73 and later)



Select **Custom**, then select the conditions as **30°C for 15 mins**.

- Por Cure 2** (version 1.2.12 and later)

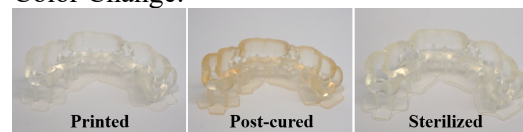


Select **Material** → **SprintRay** → **Surgical guide 3**, and then select **exposure zone**.

Sterilization:

- Models must be fully post-cured before autoclave.
- Autoclave: **15 mins at 121°C / 250°F**. No stacking of models in autoclave. Longer or hotter autoclave cycle is not needed.

Color Change:



- Allow the print to cool to room temperature. Avoid forces to the models during cooling.

Storage:

Keep the resin in the original bottle, room temperature (15-26°C / 59-79°F) in a dry and dark area. Filter out all debris in the case of fail print jobs.

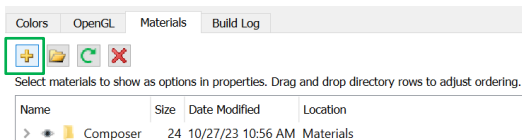
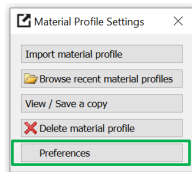
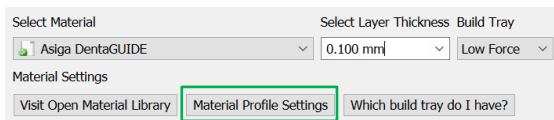
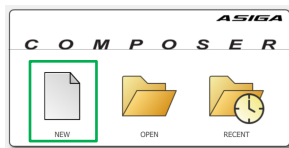
DLP SG Clear (DSP-SG001CR) Asiga Printers

Check: Resin is well shaken. Optical pathways are clean.

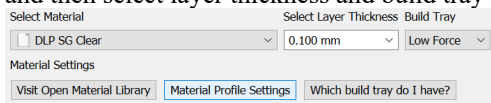
Print Settings:

Visit ApplyLabWork [support page](#) and [download .ini](#) printing profile.

Start Composer → NEW → Material Profile Settings → Preferences → select the folder where ini was downloaded → select Folder → ok



Select **DLP SG Clear** ini using drop-down menu, and then select layer thickness and build tray type.



Note, Do not place supports near the guide sleeve holes or on the intaglio surfaces.

Washing:

Ultrasonic bath, fresh IPA (95%) 3 mins max. Blow dry the models with compressed air, let models **sit dry completely, 25 mins minimum**, in a shaded airy location. Printed parts must be free of IPA before UV post-curing. Extended wash time and residual IPA (if not dried completely) causes deformation and lower mechanical properties.

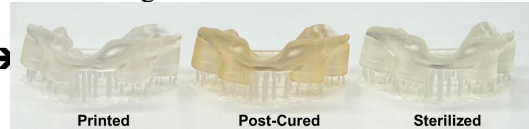
UV Post-Curing:

UV post-curing is required before sterilization. Curing setting: **Mercury X(Elegoo) 30minutes.**

Steam Sterilization:

- Prints must be fully UV post-cured.
- Autoclave: **15 minutes at 121°C / 250°F.** No stacking of models in autoclave. Longer or hotter autoclave cycles is not needed.

Color change:



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