



# trūsana™

Validated on

## **ASIGA**

## Trusana User Workflow – Asiga Printers

### Purpose

To achieve optimum physical and mechanical properties in restorations when printing with Trusana on Asiga printers.

### Formulation

The instructions outlined in this document are valid for Trusana Premium 3D Printing Resin.

### Prior to Printing

- Log in to Asiga.com
- Go to Material Library
- Choose the Myerson folder Download file: Myerson\_Trusana\_Teeth\_50mic.ini
- Ensure that 0.050mm is selected in drop-down menu under Slice Thickness
- Ensure the area is well-ventilated prior to printing
- Put on the required PPE
- Store Trusana resin in a cool, dry location between 22–25°C

### Build Plate and Resin Preparation

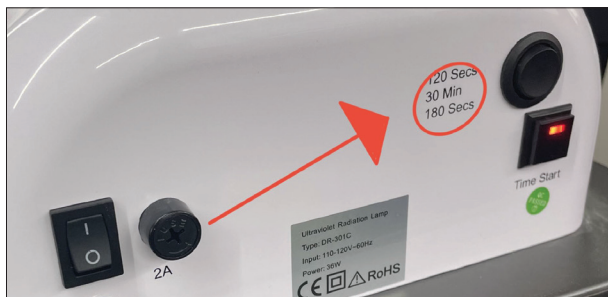
- Ensure your resin tray and build plate are clean and free of debris. Remove any visible particles. Remove solids from previous printing.
- Calibrate the printer per manufacturer's instructions including the build plate and any other necessary components.
- Vigorously shake or roll resin for five minutes prior to each print with agitation equipment if available. Longer agitation may be required.
- Pour required volume for print into resin tray.
- Remove bubbles from the poured resin with a spatula or allow them to dissipate.

### Equipment

- Asiga 3D printer
- Composer software (software used with Asiga 3D printers)
- Orbital Shaker or something similar to gently agitate the alcohol baths
- Two plastic containers with lids, one for the “Dirty” bath, one for the “Clean” bath. Containers should be large enough to hold printed parts, but also fit on the orbital shaker
- 99% isopropyl alcohol (IPA)
- Asiga Flash Curing unit (post curing equipment)
- Scientific water bath set to 80°C/176°F (annealing equipment)
- Sealable plastic bags (to keep printed objects sealed in water bath)
- Stainless steel scraper (to remove object from printer's build plate)
- Gloves
- Tongs/forceps (to minimize handling of parts)
- Timer

## Printing and Post-processing

- 1 Prep the file according to the Asiga Composer IFUs found on [myersontooth.com](http://myersontooth.com) and send the file to the printer using the build wizard in Composer and print.
- 2 After the print job is complete, wearing gloves, carefully remove the printed parts from the print platform using a scraper and place printed parts in the Dirty alcohol bath and agitate for 2 minutes. When done, move the printed parts to the Clean alcohol bath and agitate for 1 minute. *Note: It is very important to properly dispose of the IPA in the Dirty bath every few print batches, depending on the number of parts being washed, then replacing it with the IPA from the Clean bath. You can then replenish the Clean bath with fresh IPA.*
- 3 After removing the printed parts from the Clean bath, gently dry the parts using compressed air or dry on the bench for 30 minutes.
- 4 Place the printed part in the Asiga Flash Curing Unit with the base of the object flat on the tray. *Note: The cure setting on the Flash should be set to the 30-minute timer as shown below.*



- 5 Set an external timer to 12 minutes. On the Asiga Flash, press “time start” to begin curing, then start your external 12-minute timer.
- 6 Once the 12 minutes are up, turn off the Asiga Flash cure box and turn the printed part over and repeat step 6.
- 7 After curing the printed part for 12 minutes on each side (24 total minutes), remove the printed part from the cure box and place in a sealable plastic bag.

- 8 Place the sealed bag containing the printed part in the 80-degree Celsius water bath and set a timer for 10 minutes. *Note: The bag and object must be completely submerged. You can place an object on top of the bag to keep it submerged. This is a very important step and must not be skipped! The time and temperature must be strictly adhered to as the strength and esthetics of Trusana will be adversely affected if instructions are not followed.*
- 9 Once the timer goes off, take the printed part out of the water bath, and let it cool in the sealed bag until the printed part comes to room temperature. Once cooled, you are free to remove the fully cured printed part from the plastic bag.

## Finishing

- Please note it may take 24-48 hours after removing the printed part from the water bath for the final shade to develop.
- You may polish Trusana similar to Duraflex or other Myerson dental materials.
- You may use light curable composites, such as Gradia or Optiglaze according to the manufacturer’s instructions. These can be found on [myersontooth.com](http://myersontooth.com).

## Clean up

- Place a funnel on top of the bottle of resin used to print.
- Place a filter paper in the funnel.
- Carefully pour resin from print tray into funnel. Use a spatula to guide resin into funnel to avoid spilling. Remove funnel when all resin is back in the bottle. Securely fasten cover of resin bottle. Discard filter paper.
- Wash or wipe down print tray and any other apparatus used with isopropyl alcohol and tissue.
- Allow to dry before using again.

## Maintenance

- Follow manufacturer’s maintenance guidelines for all equipment used.