



# trūsana™

Optimized for

## **ASIGA**

## Asiga Printers: Trusana Printing Process

### Purpose

To achieve optimum physical and mechanical properties in final 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, go to [asiga.com](http://asiga.com) to download the settings necessary to print Trusana.

### Equipment

- Asiga 3D printer
- Composer software (slicing software used with Asiga 3D printers)
- 2 rotating washer baths (Ensure build platforms fit in washer baths. The rotating washer baths are very specific to the build platforms of the printer in use. Build platforms should fit in the washer bath.)
- Isopropyl alcohol (IPA) 100% pure—no added water
- Asiga Flash (post curing equipment)
- Water bath set to 80°C (annealing equipment)
- Sealable plastic bag (to keep samples sealed in water bath)
- Stainless steel spatula (to remove object from printer's build plate)
- Tongs/forceps (to minimize handling of parts)
- Timer

## Steps

**1** Prep the file in Composer. Make sure to have uploaded the material file for Trusana and apply it to your file. When printing objects, make sure to generate supports for best prints.

**2** Send the object to the printer using the build wizard in Composer and print.

Note: When washing the objects, there are two wash baths, one with a “dirty” IPA solution and the other with a “clean” IPA solution. The “clean” solution will become dirty after enough washes. The “dirty” solution is called dirty due to the resin concentration in the IPA making it less efficient.

**3** After the print is complete, remove the print platform from the printer and place in the “dirty” bath first (rotating washer bath filled with isopropyl alcohol) and swirl the tank for 3 minutes. Make sure the objects are left on the build plate while washing. The direction of the swirl should change between each minute.

**4** Remove the print platform (with the printed object still on the platform) from the “dirty” wash bath and place it in the “clean” solution for a 2-minute wash, again with a different direction of swirl each minute.

**5** Once completed, remove the print platform with the object immediately from the wash bath. At this point, begin gently removing the object from the platform without touching the object using a scraper, and allow it to air dry.

**6** Once dry, use the Asiga Flash cure box to cure. The cure setting on the Flash should be set to the 30 minute timer as shown below:



**7** Place the object in the Asiga Flash cure box with the base of the object flat on the tray. Set a timer to 12 minutes. On the Asiga Flash, press “time start” to begin curing. At this time, start your 12 minute timer.

**8** Once the 12 minutes are up, turn off the Asiga Flash cure box and flip your object in the tray. Then repeat step 7.

**9** After curing your object for 12 minutes twice (24 total), remove the object from the cure box and place in a sealable plastic bag.

**10** Place the sealed bag with the object in your heated water bath and set a timer for 10 minutes. The bag and object must be completely submerged.

**11** Once the timer goes off, take the object out of the water bath and let it cool in the sealed bag until the object comes to room temperature. Once cooled you are free to remove the object from the plastic bag and remove any supports on the object.