3DMaterials® Dental Finishing Steps Water cleaning

1. Cleaning with warm tap-water All Dental resins from 3DMaterials® are water washable. Just rinse prints in warm tap-water after scrubbing it with soap and sponge and dry it with air. Uncompleted cleaning and short air drying give sticky surface and yellowing even after post-curing. It is very important to make sure all remain resin is completely washed and water in prints is completely dried out by air drier.
2. WARNING : Do not leave printed parts in warm-water tank for more than 5 min. Since surface of printed parts is not completely cured, water can damage the surface and penetrate weak part and result in cracks during post-curing process.

3DMaterials® Dental Finishing Steps (water and IPA)

1.Cleaning with warm tap-water TIP : To speed up drying process, rinse the water-cleaned parts in IPA (Iso Propanol)once, dry it with air. Do not leave the cleaned parts in IPA more than 3 minutes, it result in cracks during post-curing process. Water-wash and 1 minutes in IPA ultrasonic cleaning give the better result. TIP : Drying all remain water is the most important step. Please use a hair dryer to dry water out, it give the best clean and matt surface.

2. Cleaning with IPA You can use IPA instead of warm tap-water to clean excess resins, but more than 3 minutes exposure to IPA will result in cracks in prints. Just put prints into IPA and shake it couple times and remove it from IPA. This will speed up washing and drying processes.

WARNING : Do not leave printed parts in IPA for more than 3 min. IPA penetrate weak part and result in cracks during post-curing process. Always consult the safety data sheet (SDS) of IPA and handle IPA with gloves in a well-ventilated area. Keep away from heat, sparks, and open flame.

3.Post-Curing All 3DMaterials® Dental resins require post-curing. Postcuring strengthens crosslinks in the polymer structure, improving the prints' strength, stiffness, and temperature resistance. Due to the increased number of bonds, the material becomes more tightly "packed." Therefore, post-curing also causes minor shrinkage. Biocompatible Dental CB, SG and DB are tested after post-curing to ensure that the post-cured parts meet the safety and accuracy requirement for biocompatibility. It is very important to ensure all printed parts are completely cured with post-curing.

All 3DMaterials® resins are designed to be post-cured by 405nm or lower wavelength. Heating is not required but it will help post-curing. Post-curing time should be adjusted based on resin types & Post-Curing machine, CB resins need the longest post-curing time followed by SG, DB, DCast and DM.