

SprintRay Die & Model 2

Instructions For Use

Indication

The SprintRay Die & Model 2 resin is a light-curable polymerizable resin intended to be used to fabricate teeth models, which can be used for multiple purposes such as:

1. Aligner model.
2. Retainer model.
3. Bleaching Tray model.
4. Wax-up model.
5. Removable die model.
6. Custom impression tray.

Contra-indication

The SprintRay Die & Model 2 resin is contraindicated in case of the following:

1. If a patient is known to be allergic to any of the ingredients.
2. Direct intraoral contact of uncured or partially uncured material.
3. For every application that is not part of the indication (see above).

Handling and Processing

SprintRay Die & Model 2 resin is non-toxic in both liquid and solid form, and it is classified as Biocompatible material, approved by FDA. It is also classified as a sensitizer, which means that exposure over time can cause your body to have a mild allergic reaction. May cause skin irritation. May cause an allergic skin reaction. May cause severe eye irritation. May cause respiratory irritation. Here is how to handle resin safely:

1. Always wear gloves

Always wear gloves when handling uncured resin. Whether you are pouring, removing models from the platform, or even after models have been washed, must wear gloves to

limit exposure to resin.

2. Mix thoroughly

3D printing resins contain chemicals of different weights; therefore, it is essential to mix resin before every print thoroughly. For resin already in the tank, use provided resin wiper to stir the material gently. If pouring from a bottle, shake the bottle vigorously for several minutes before dispensing.

3. Filter resin

When pouring resin from your tank or other vessels back into the bottle, always pour through a fine mesh filter. The filter will trap partially cured debris and prevent contamination of the rest of your bottle, prolonging the life of your materials.

4. Check expiration dates

Resin has a shelf life; it is essential to keep an eye on the expiration date. The use of expired resin will likely result in failed prints, as the compounds required for curing break down and will not activate properly. The expiration date for resins is printed on the back of the bottle.

5. Dispose of properly

Liquid resin should be cured before being disposed of. Pour liquid resin into a clear container and set it in direct sunlight. Once cured, it can be treated as waste and disposed of in regular trash.

Fabrication of Dental Model

1. Preparation Before Printing

Being prepared is key for success! As you plan to implement this new workflow, check all the supplies and inventory you may need or desire for a seamless workflow.

- Pro Printer
- Pro Wash/Dry
- ProCure
- RayWare software
- SprintRay Die & Model 2 Resin
- Gloves
- (IPA) Isopropyl Alcohol **91%** or higher

- Scott Shop towels
- Protective eyewear

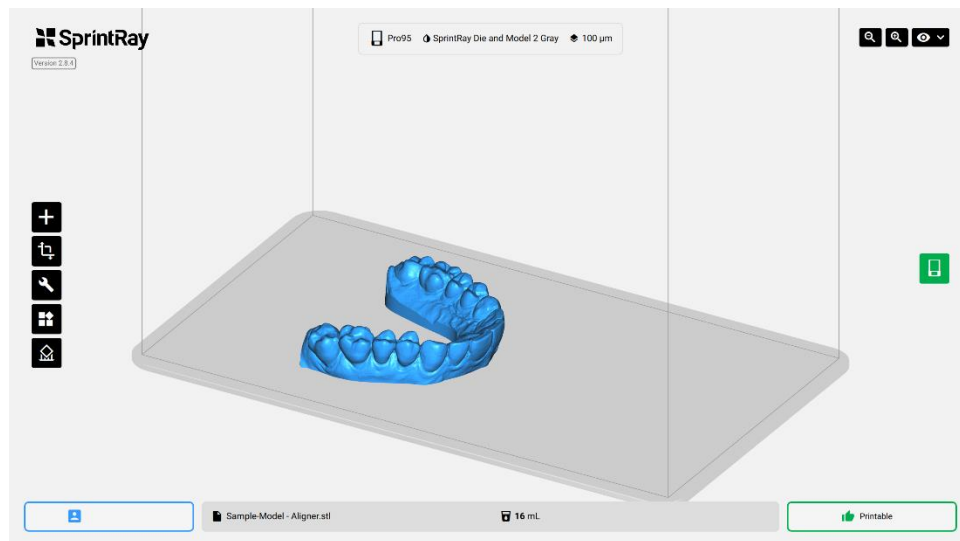
2. Design of the Dental Model

Once the intraoral scans of the patient are submitted to a dental-design service/lab, the dental model is designed and provided in STL file format by the dental-design service/lab.

3. Printing

Bring the designed STL files to RayWare. Position the dental model design with teeth facing away from the print platform (teeth facing up) and the base lying flat on the print platform.

Select “SprintRay Die Model 2” resin setting for print-setting and use 100-micron thickness.



Make sure Resin Tank is fully secured and filled to the recommended Resin-Level. Ensure the Print Platform is clean, dry, securely placed, and locked on the platform arm.

4. Washing and Drying

After your Dental Model has been printed successfully, it must be washed using Isopropyl Alcohol (IPA) with a concentration of 91% or higher before being post-cured.

SprintRay highly recommends Pro Wash/Dry for your cleaning process; however, if you don't have access to a Pro Wash/Dry yet, you may allocate a separate Ultrasonic bath

dedicated to post-print washing with IPA, or alternatively, a dish for soaking along with a Soft/Medium bristle brush to manually clean your prints in IPA. Make sure NOT to immerse the Dental Model for more than 10 min in the IPA bath.

Remember: IPA is highly flammable! Please keep it away from heat sources, sparks, and flames.

Ensure that your Dental Model is completely dry before the next step; if not, use compressed air to dry your Dental Model rapidly.

Remove the Dental Model from the Print Platform.

5. Post curing

Next, the printed Dental Model needs to be properly post-cured using a ProCure to maximize strength and accuracy and comply with FDA standards.

All the post-curing settings are preset in ProCure 1 and ProCure 2 unites.

Additional Help & Support

We are here to support you throughout the implementation period of your new technology and throughout the life of your product. Our experienced support technicians are available M-F from 7 am – 5 pm PST at 800-914-8004 (EXT 2).