$R\,e\,v\ 0\,2\ 0\,9\,/\,2\,0\,2\,4$

TD.13.15

1

Instructions for use

















CRS® Custom Cast Resin

Printer compatibility 385 nm / 405 nm

Description:

The instructions for use are for dental professionals who use "Custom Cast Resin" as a material for investment casting & ceramic pressing applications.

This instruction for use also provides information about tips&tricks, safety and environmental aspects. In case more information is needed, contact the reseller.

It is intended exclusively for professional dental work.

Indications for Use:

Custom Cast Resin designed for residue-free and precise dental castings. Custom Cast Resin is compatible with a variety of investment materials for clean burnout using rapid or gradual temperature ramping, such as removable partial denture frames, crowns, bridges and copings.

Custom Cast Resin is a liquid photopolymer resin designed for additive manufacturing in vat Polymerization DLP printers utilizing wavelengths between 385nm-405nm.

Contraindications:

Custom Cast Resin must not be used for any other purposes than those specified in the "Indication" section.

Any deviation from this instruction for use may have negative effects on the chemical and physical quality of the restorations produced from Custom Cast Resin.

Do not use the product in case of a known allergy to one or more ingredients.

In case of doubt, clarify and exclude a possible allergy with the help of a specific allergy test before using Custom Cast Resin.

Custom Cast Resin is contraindicated when there is direct intraoral contact with resin that is not fully cured

In case of an allergic reaction, please contact a medical physician.

Notes:

Custom Cast Resin is intended to be used in combination with DLP and LCD based 3D printers that support CRS resins.

Printer and resin must be optimized to each other in order to produce complete and precise printed parts. If the printer and resin are not optimized with respect to each other this may have an adverse effect on the accuracy and physical quality of printed parts.

CRS shall not be held liable for any damage caused by misuse.

Always keep bottle tightly closed, carefully close immediately after each use.

Product may cause allergic reactions.



TD.13.15

Instructions for use















CRS® Custom Cast Resin

Printer compatibility 385 nm / 405 nm

Warning and Precautions:

Custom Cast Resin is a non-toxic material after the proper printing and post-processing procedures.

Skin Contact: May cause skin irritation. If unprocessed resin contacts skin, wash thoroughly with soap and water. May cause an allergic skin reaction. If skin sensitization occurs, stop using. If dermatitis or other symptoms persist, seek medical assistance.

Inhalation: High vapor concentration may cause headache, irritation of eyes and/or respiratory system. If exposed to a high concentration of vapor or mist, move to fresh air. Use oxygen or artificial respiration as required.

Eve Contact: Wash the contacted area thoroughly with soap and water.

Ingestion: Contact and seek medical assistance immediately.

Fabrication of Device:

Design:

The data to be produced must be prepared in .stl format with the support of CAD software by the relevant person.

Support and Nesting:

The layout and support settings in the slicer program should be configured according to the support settings prepared or recommended by CRS for the specific design you will be printing.

In case more information is needed, contact the reseller.

Note: It is recommended that the prosthesis be placed on the build platform in a way that does not provide support to the areas where it will fit onto the teeth.

We highly recommend printing the design with full supports to avoid any inaccuracies in the final products.

Print:

Ensure the 3D printer is clean prior to use, including the imaging area and any optical surfaces. Ensure the resin tray is clear of solid debris prior to commencing a print. The presence of solid particles in the resin may cause deformation or failure of the printed objects.

Nitrile gloves should be worn at alltimes when handling CRS liquid resins up until the finishing step. Avoid contact with skin.



TD.13.15

1

Instructions for use















CRS® Custom Cast Resin

Printer compatibility 385 nm / 405 nm

Mix Before Use:

Shake bottle mightily prior to pouring for at least one minute.

Stir material with a soft spatula. Take care not to damage the bootm of the resin tray. This step is necessary to re-disperse the (possible) pigment sediment from the bottom of the vessel. Colour deviation and print failures may occur if insufficiently mixed.

Fill Resin Tray:

Ensure the temperature of the resin is between 22 and 30°C (68 and 86°F) and prevent exposure to direct sunlight. Pour the resin into the resin tray of the 3D printer.

Printer Settings:

Custom Cast Resin is optimised to build parts using light with 385nm or 405nm wavelength.

You need to use the customized and validated resin profile settings for LCD or DLP technology printers. You must ensure the calibration and light intensity accuracy of the 3D printers you are using for measurement precision.

You can find the recommended profile settings from CRS on the website or through the dealer. Ensure the film of the resin tray is clear of any debris before starting the print.

Part and Support Removal:

After your device has been printed, remove it from the print platform using the provided print removal tool. Remove all supports using a flush cutter or round disc. Cut as close as possible to the printed part to minimize the smoothening and finishing procedure.

If Print Fail:

Remove the resin tray from the printer and filter the resin through a fine 190 Micron paint strainer, if:

- print has failed partially or completely,
- particulates of polymerized residues are visible in the container or stick to the bottom.



+90 242 505 64 99 | www.crscam.com

TD.13.15

1

Instructions for use

















CRS® Custom Cast Resin

Printer compatibility 385 nm / 405 nm

Wash:

Wash parts in at least 98% pure isopropyl alcohol (IPA) in a well ventilated area.

Best results are achieved when using a pre and post wash.

Using an ultrasonic cleaning device or alternatively, devices that create a vortex for washing are recommended:

- Pre-wash bath: 90 seconds.
- Post-wash bath: 90 seconds.

Note 1: After each washing process, follow by using compressed air to thoroughly dry the printed part, and then assess the cleanliness of the surface.

Note 2: Ensure a dedicated IPA bath is used for washing Custom Cast parts. Do not wash in IPA that has previously been used for washing other materials. Wiping any resin residue away with a dry cloth is permitted should there be any remaining after the IPA washing steps. Allow parts to dry thoroughly before post-curing

Post-Cure:

Due to the special formulation of Custom Cast Resin, it definitely does not require "post curing" unlike its competitors in the field.

Finishing:

After the washing process, it needs to be placed in the sleeve without any curing.

Storage Conditions, Expiry Date & Transport:

Store the resin in the original packaging at room temperature in a dry, cool and dark area. Close the packaging after each use.

To protect against contamination, cover the material in the resin tray with the lid or a glass plate.

The expiry date of the product is mentioned on the product label along with the lot number.

The standard shelf life is up to 4 weeks in the printer with the cap on, or up to 2 years in the bottle in a cool, dark place without opening the cap.

The product performance is no longer guaranteed once the expiry date is exceeded. Do not expose to UV-light.

Standard transport conditions apply to this product. There are no restrictions for transport related to hazardous substances.



TD.13.15

1



















CRS® Custom Cast Resin

Printer compatibility 385 nm / 405 nm

Disposal:

Custom Cast Resin in its polymerized form is not environmentally harmful thus can be disposed of in general waste.

Custom Cast Resin in its liquid state should be treated as chemical waste. Special disposal requirements are applicable, check with your local, federal, or other regulatory agencies for disposal requirements.

Delivery Units:

Custom Cast Resin is available in 1 colour: Yellow Ordering Information: 1000 gr, 500 gr, 250 gr



+90 242 505 64 99 | www.crscam.com