

P2C™ Jewelry Bold & Fine resins

Properties*

Color		Wavelength	Recommended Investments
Fine (Red)	Bold (Green)	385–405 nm	FlashCast™, Plasticast® PT, Plasticast®, Liberty-Vest™, & SC-RP

Step 1: Preparation

Mixing the Resin

1. Thoroughly mix the resin. This step is necessary to re-disperse any pigment sediment at the bottom. Insufficient mixing may result in color deviations and print failures.
 - Using bottle: Shake for at least 2 minutes before carefully pouring the resin into the tray.
 - Using roller: Place the resin bottle on a roller mixer for optimal and consistent mixing.
 - In material tray: Stir the resin with a soft spatula, being careful not to damage the film in the tray.
2. Remove any bubbles with a clean spatula.

Step 2: Printing Process

1. Prepare the file by importing it into the corresponding slicing software.
2. Ensure proper design and placement of support structures to avoid print failures.
3. Ensure the print platform is clean, dry, securely placed, and locked on the platform arm.
4. Follow the printer manufacturer's instructions during operation.
5. Once the printing process is complete, post-processing is required. If post-processing cannot be completed immediately, leave the printed models in the printer until ready.

Step 3: Post-Processing

1. Carefully detach the printed objects from the build platform using a firm spatula.
 - Note: Some light bubbling may occur, this is normal and does not indicate a problem with the print.
2. Remove support structures as needed.

3. Clean the print objects in two steps, using isopropyl alcohol (IPA) baths:
 - Dirty wash: Clean for 2 minutes in a reusable IPA solution
 - Clean wash: Thoroughly clean for 2 minutes using IPA solution.
4. Allow the parts to dry completely, which may take up to 30 minutes. For faster drying, gently use compressed air.

Step 4: Post-Curing

1. Prepare a post-curing unit with the R&R Jewelry Cast resin.
 - Using a stroboscope device, such as an Otofash, cure 2000 flashes on each side.
2. Post-cure the cleaned print objects according to the manufacturer's instructions for the curing unit to ensure complete polymerization and stability before casting.

Step 5: Pattern Setup

1. Lightly polish the part with a rotary brush to remove any remaining support marks.
2. Using a rubber base, sprue the patterns in a conventional manner, either by attaching wax sprues or utilizing printed sprues.

Step 6: Investing & Burnout

Investing with High Temperature Investments

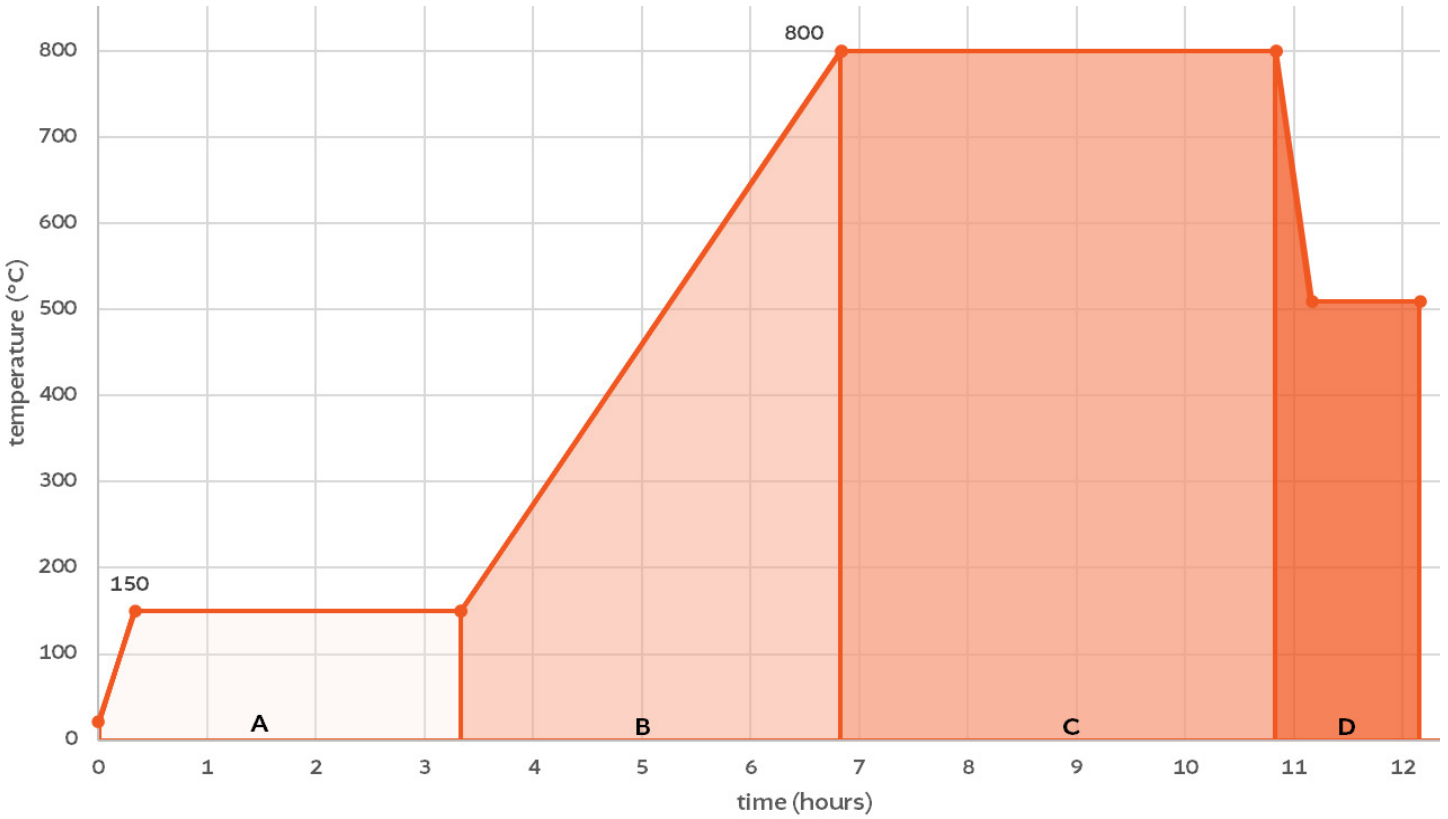
- Follow FlashCast™ instructions for mixing, pouring, bench cure and burnout.
- Follow Plasticast® PT instructions for mixing, pouring, bench cure and burnout.

Investing with Low Temperature Investments

- Follow Plasticast®, Liberty-Vest™, and SC-RP instructions for mixing, pouring, and bench cure.

*Proceed to Page 2 for Oven Loading & Burnout Cycle for Low Temperature Investments.

Oven Loading & Burnout Cycle



Burnout Schedule		Phase	Time (hours)	Schedule °C	Schedule °F
A	Dry	Ramp	As Fast As Possible		
		Hold	3	150	300
B	Thermal Transition	Ramp	3.5	3°C/min	5.6°F/min
C	Pattern Removal	Hold	4	800	1470
D	Casting	Ramp	As Fast As Possible		
		Hold	1	Alloy Manufacturer's Recommendations	

*These results are based on the testing methods, frequency and procedures of Ransom & Randolph or its approved suppliers. The levels referenced herein are only for general guidance and do not constitute a firm specification.

Tips

- If you cannot invest patterns immediately after curing, an inhibition layer may develop. To remove, repeat steps 3 and 4 from the Post-Processing section.
- The burnout schedule described is a recommendation. Adjustments may be required for various furnace types, pattern, flask size, and oven loading.
- R&R Jewelry Cast resin can stain clothing; wear appropriate protective clothing.
- Before and after every print, ensure the tray is clear of any cured debris. Printing with cured debris may cause damage to the tray or distort future prints.
- Deviation from the recommended processing instructions can negatively impact the resin's chemical and physical properties, affecting the quality of the prints.
- For any questions, please contact technical support at Jewelrytech@Ransom-Randolph.com

Storage

Keep the container tightly sealed and close it immediately after each use to prevent curing from ambient light. Store at room temperature in a dry, dark area. Do not use the resin after its expiration date as its properties may degrade.

Safety

Warning. May cause an allergic skin reaction. Wear protective gloves, protective clothing, eye protection, and/or face protection. Avoid skin or eye contact. If contact occurs, wash thoroughly after handling. Harmful to aquatic life with long-lasting effects. Treat as a chemical waste while in its liquid (uncured) form. Follow local, federal, or other regulatory guidelines for disposal. Once polymerized (cured), it can be disposed of as general waste. See SDS for more information.

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user. All potential liability related to the sale and use of this product is limited to the cost of the particular goods sold in their respective transactions.