RODIN®
3D Resin

A **Pac-Dent** Brand

TRY-IN

Instruction For Use

Pac-Dent®
Passion for Excellence

For Try-In Denture Models

TRY-IN

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Rodin Try-In

Instructions for Use

Revision 090426

TABLE OF CONTENTS

1. PRODUCT DESCRIPTION

Rodin Try-In resin is a light-curable dental resin designed for the fabrication of 3D-printed dental try-in appliances. The material is intended for use in digital dental workflows to produce temporary try-in appliances that allow clinical verification of the proposed prosthetic design before fabrication of the definitive prosthesis. Its distinct shade facilitates visual assessment and communication during the try-in process.

2. MATERIAL COMPOSITION

Rodin Try-In resin is comprised of;

- Monomer
- Oligomer
- Photoinitiator
- Photoinhibitor
- Pigment
- Ceramic Fillers

3. INTENDED USE

Rodin Try-In, 3D resin is intended for the fabrication of dental try-in appliances for temporary intraoral evaluation of fit, occlusion, and esthetics prior to fabrication of the definitive prosthesis.

The fabricated appliance is intended for professional use and temporary evaluation only and is not intended for use as a definitive or long-term dental prosthesis

4. INTENDED CUSTOMER

The product is exclusively intended for use by trained professional dentists or dental lab technicians. Sales are restricted to:

- Dental supply dealers
- Teaching institutions
- It is labeled for sale to dentists (or properly licensed practitioners) only.

5. CONTRAINDICATIONS

Contraindicated for patients with known hypersensitivity or allergic reactions to methacrylate-based materials.

Exposure to methacrylate-based materials may trigger allergic reactions in sensitized individuals.

6. SAFETY INFORMATION

Always consult the Safety Data Sheet (SDS) for the most complete information regarding hazards, handling, and disposal.

6.1. General Safety Warning

- Rodin Try-In Resin contains methacrylate-based compounds. Individuals sensitive to methacrylate-based compounds may experience allergic reactions when exposed to uncured resin.
- Avoid direct skin contact with uncured material
- Ingestion: If swallowed, rinse mouth with water. Do not induce vomiting. Seek medical attention if symptoms occur

6.2. Recommended personal protective equipment (PPE)

When handling uncured resin:

- Protective Gloves
- Eye protection
- Protective clothing (Lab coat or apron)
- Closed-toed shoes
- Respiratory protection may be required in poorly ventilated environments or where local regulations mandate its use.

7. KEY FEATURES

Exceptional Precision: Achieve intricate details and dimensions with utmost accuracy, essential for replicating precise dental structures supporting accurate evaluation of fit and esthetics.

Enhanced Patient Care: Supports clinical evaluation of fit, occlusion, and esthetics, helping reduce the need for chairside adjustments.

Ease of Workflow: Supports rapid verification of digital prosthesis designs prior to fabrication of the final prosthesis.

Unique Shading: Shaded in off-white to help practitioners identify details and characteristics of contours and anatomy while minimizing blinding effects that a pure white shade produces.

8. ORIENTATION CONSIDERATIONS

Effective orientation is crucial when printing with Rodin Try-In, 3D Resin to optimize print quality and ensure accurate clinical evaluation. Proper orientation helps preserve critical surfaces used to assess fit, occlusion, esthetics, and overall prosthesis design during the try-in stage.

8.1. Orientation

Try-In Orientation Strategy: Position the try-in appliance with the intaglio surface facing away from the build platform. Place support structures only on non-critical surfaces whenever possible.

8.2. Advantages

Preserves Critical Evaluation Surfaces: Keeping the intaglio surfaces away from the build plate minimizes support contact and post-processing on tissue-contact surfaces, helping maintain accurate fit evaluation.

Improves Clinical Verification: This orientation supports reliable assessment of seating, occlusion, implant positioning, esthetics, and phonetics during the try-in appointment.

Reduces Print Defects: Angled positioning can improve resin drainage, reduce peel forces, and minimize the risk of distortion in larger prostheses.

Streamlines Finishing: Placing supports on non-critical surfaces helps simplify post-processing while preserving areas essential for clinical evaluation.

9. VALIDATED EQUIPMENT

9.1. Validated 3D Printers

For the most current list of validated equipment and their settings, please refer to the provided link:

https://rodin-3d.com/validated-equipment-settings/

9.2. Validated Light-Curing Parameters

For the most current list of validated equipment and their settings, please refer to the provided link:

https://rodin-3d.com/validated-equipment-settings/

10. RESIN PREPARATION & MIXING

Proper mixing ensures homogeneity of pigments and fillers and supports consistent print quality.

10.1. Mixing Resin in the Vat

- Gently mix with a silicone blade
- Re-suspend settled pigments
- Strain failed-print resin using a 50-micron mesh strainer

10.2. Preparing Resin from the Bottle

- Stir thoroughly with a plastic spatula
- Alternatively, roll on an automated roller
- 30 Minutes (regular use)
- 1 hour if stored for more than one month

10.3. Printing Environment and Temperature

Light Exposure

Protect the resin from direct sunlight, UV light, and strong artificial light during handling and printing. Keep resin vats covered when not in use.

Resin Handling

Keep resin containers tightly closed when not in use. Ensure vats, resin tanks, and handling tools are clean and free of contamination.

Temperature Control

Optimal Printing Temperature: Most photopolymer resins have an optimal printing temperature range, typically around 70°F to 85°F (21°C to 29°C). Maintaining this temperature range ensures consistent viscosity and print performance.

Heated Environments: For printers with temperature regulation, setting the printing environment to around 35°C can optimize performance. This helps maintain the resin's ideal flow characteristics.

Cold Conditions Management: If the resin is stored or used in colder conditions, gently warming the resin to the optimal temperature is necessary. This can be done using a warm water bath or temperature-controlled heating mats, ensuring the resin is sealed to prevent water contamination.

11. POST-PROCESSING INSTRUCTIONS

11.1. Removal from Printer

Post-Printing Removal: Remove the build platform from the 3D printer.

Try-In Removal: Using a metal spatula, carefully work around the print base until the printed Try-In detaches from the build plate. Avoid excessive force to minimize the risk of deformation or damage.

11.2. Removing Excess Resin

Resin Removal: Use low-pressure air to remove excess uncured resin from the printed Try-In and build plate.

Aluminum Build Plate Caution: Resin may discolor if it comes into contact with an oxidized aluminum build plate due to potential contamination from metal oxides.

12. CLEANING

12.1. Cleaning Recommendations: Rodin® Universal Resin Cleaner

1. Remove Excess Resin: Wipe away or blow off excess residual resin from the printed object using compressed air or a paper towel.
2. Run Prewash Cycle 3 Minutes: Place the object in an ultrasonic, vortex, or oscillating bath filled with Rodin® Universal Resin Cleaner. Run the prewash cycle for 3 minutes.
3. Scrub Surface (Optional): After the prewash, dip a clean brush into a fresh batch of Rodin® Universal Resin Cleaner and thoroughly scrub the entire surface of the object.
4. Run Secondary Wash Cycle 3 Minutes: Transfer the object to an ultrasonic, vortex, or oscillating bath filled with fresh Rodin® Universal Resin Cleaner. Run this secondary cycle for 3 minutes.
5. Dry the Object: Blow off any remaining wash solution using compressed air until the object is completely dry.
6. Inspect for a Matte Finish: Crucial before post-curing. Examine the object closely for any shiny spots.
    - If shiny areas are present: Residual resin remains. Repeat the secondary wash (Step 4) and drying process (Step 5).
    - If the surface is completely matte: The object is clean and ready for post-curing.

12.2. Cleaning Recommendations: 99%+ Isopropyl Alcohol (IPA)

Never submerge printed objects in Isopropyl Alcohol for a combined total of more than 10 minutes. Prolonged exposure to IPA will break down the resin, causing degradation to the mechanical properties and structural integrity of the final printed part.

1. Remove Excess Resin: Wipe away or blow off excess residual resin from the printed object using compressed air or a paper towel.

2. Run Prewash Cycle 3-4 Minutes: Place the object in an ultrasonic, vortex, or oscillating bath filled with IPA. Run the prewash cycle for 3 to 4 minutes.
3. Scrub Surface (Optional): After the prewash, dip a clean brush into fresh IPA and thoroughly scrub the entire surface of the object. Do not leave the part soaking in a bath during this step.
4. Run Secondary Wash Cycle 3-4 Minutes: Transfer the object to an ultrasonic, vortex, or oscillating bath filled with fresh IPA. Run this secondary cycle for 3 to 4 minutes.
5. Dry the Object: Immediately after removing the part from the secondary wash, blow off all remaining solvent using compressed air until the object is completely dry.
6. Inspect for a Matte Finish: Crucial before post-curing. Examine the object closely for any shiny spots.
    - If shiny areas are present: Residual resin remains. Do not run another full wash cycle. Spot-clean the shiny areas manually with a brush dipped in fresh IPA, then dry immediately with compressed air.
    - If the surface is completely matte: The object is clean and ready for post-curing.

13. STORAGE CONDITIONS AND SHELF LIFE

- Store in the original tightly closed container in a cool, dry, and well-ventilated place.
- Recommended storage temperature: 4°C to 25°C (40°F to 75°F).
- Protect from direct sunlight, UV light, curing light sources, excessive heat, moisture, contamination, and ignition sources.
- Do not freeze.
- Keep the container upright and tightly closed when not in use.
- Refer to product labeling for the expiration date.
- Do not use after expiration.

14. DISPOSAL & WASTE MANAGEMENT

14.1. Classification of Waste

Dispose of resin and resin-contaminated materials in accordance with applicable federal, state, and local regulations. Uncured resin should be treated as chemical waste and must not be discharged into drains, sinks, or the environment.

14.2. Disposal of Liquid Resin

Do not dispose of uncured liquid resin directly into the trash or down the drain. Unused or waste resin should be fully cured using an appropriate UV light source before disposal, where permitted by applicable regulations.

14.3. Solid Resin Waste

Ensure printed Try-Ins, failed prints, supports, and other resin waste are fully cured before disposal. Fully cured resin waste may be disposed of as solid waste in accordance with applicable local regulations.

14.4. Personal Protective Equipment (PPE) and Cleaning Materials

Dispose of gloves and other PPE contaminated with uncured resin in accordance with applicable waste-disposal requirements. Paper towels, cloths, and other cleaning materials contaminated with uncured resin should be fully cured before disposal, where appropriate.

15. LEGAL DISCLAIMER

Pac-Dent Inc. Release of Liability

Pac-Dent Inc. (“the Company”) expressly disclaims any and all liability associated with the improper use of its products, including but not limited to its range of 3D printing resins, tools, and equipment intended for dental applications. The end user (“User”) acknowledges and agrees that strict adherence to the instructional guidance provided by the Company is essential for the correct use, function, and performance of the product (“Product”).

The User understands that deviation from the provided instructional guidance, or the use of invalidated or unauthorized equipment in conjunction with the Product, may result in alterations to the function and performance of the Product. The Company shall not be held responsible or liable for any such alterations or any consequences thereof.

By using the Product, the User agrees to indemnify, defend, and hold harmless Pac-Dent Inc., its officers, directors, employees, agents, affiliates, successors, and assigns from and against any and all losses, claims, damages, expenses (including reasonable attorneys’ fees), or liabilities of any kind arising out of, related to, or in connection with the User’s deviation from the provided instructional guidance or use of invalidated equipment.

This release of liability is binding upon the User, and, as applicable, the User's heirs, executors, administrators, legal representatives, and assigns. It is the User's responsibility to ensure comprehension and observance of this disclaimer and all accompanying instructional materials provided by the Company.

THE COMPANY'S LIABILITY UNDER THIS DISCLAIMER, IF ANY, SHALL BE LIMITED TO THE PURCHASE PRICE PAID BY THE USER FOR THE PRODUCT. IN NO EVENT SHALL THE COMPANY BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR INDIRECT DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE PRODUCT.

The User's acceptance of the Product constitutes acceptance of these terms and an agreement to be bound hereby.

16. MANUFACTURER INFORMATION

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