RI RESIONE W90B

RESIONE W90B Water Washable 3D Printer Resin User Manual

Brand: RI RESIONE | Model: W90B

Introduction

This manual provides essential instructions for the safe and effective use of RESIONE W90B Water Washable 3D Printer Resin. This 405nm standard photopolymer resin is designed for LCD, DLP, and MSLA 3D printing, offering easy water-based cleaning and improved toughness compared to standard resins.



Image: RESIONE W90B Water Washable Resin bottle alongside a detailed 3D printed model, showcasing the product and its application.

Safety Precautions

Always prioritize safety when handling 3D printer resin. Follow these guidelines:

- Store resin in a sealed, shaded, and cool place, away from direct sunlight and heat sources.
- Keep resin out of reach of children and pets.
- Avoid contact with skin and eyes. Wear appropriate personal protective equipment (PPE) such as gloves and safety glasses when handling resin.
- Ensure adequate ventilation in your workspace to minimize exposure to fumes.
- Do not ingest the resin. If swallowed, seek immediate medical attention.
- If resin is not used in the 3D printer for more than one day, filter it with a filter funnel and pour it into an empty container. Do not pour used resin back into the original bottle to prevent contamination.



Image: An attention warning sign emphasizing important handling instructions for the resin.

Setup

Before starting your print, ensure your 3D printer is clean and properly calibrated. The RESIONE W90B resin is designed for ease of use, even for beginners.

1. **Shake the Resin Bottle:** If the resin has been stored for a period, gently shake the bottle for 3-5 minutes in warm water to ensure proper mixing, especially if separation has occurred.
2. **Pour Resin into Vat:** Carefully pour the RESIONE W90B resin into your printer's resin vat. The resin has low viscosity and good fluidity, making it easy to handle.
3. **Printer Settings:** W90B resin is compatible with various LCD/DLP/MSLA 3D printers. Refer to your printer's manual for recommended exposure settings. For optimal results, consider starting with settings for standard 405nm UV-curing resins.

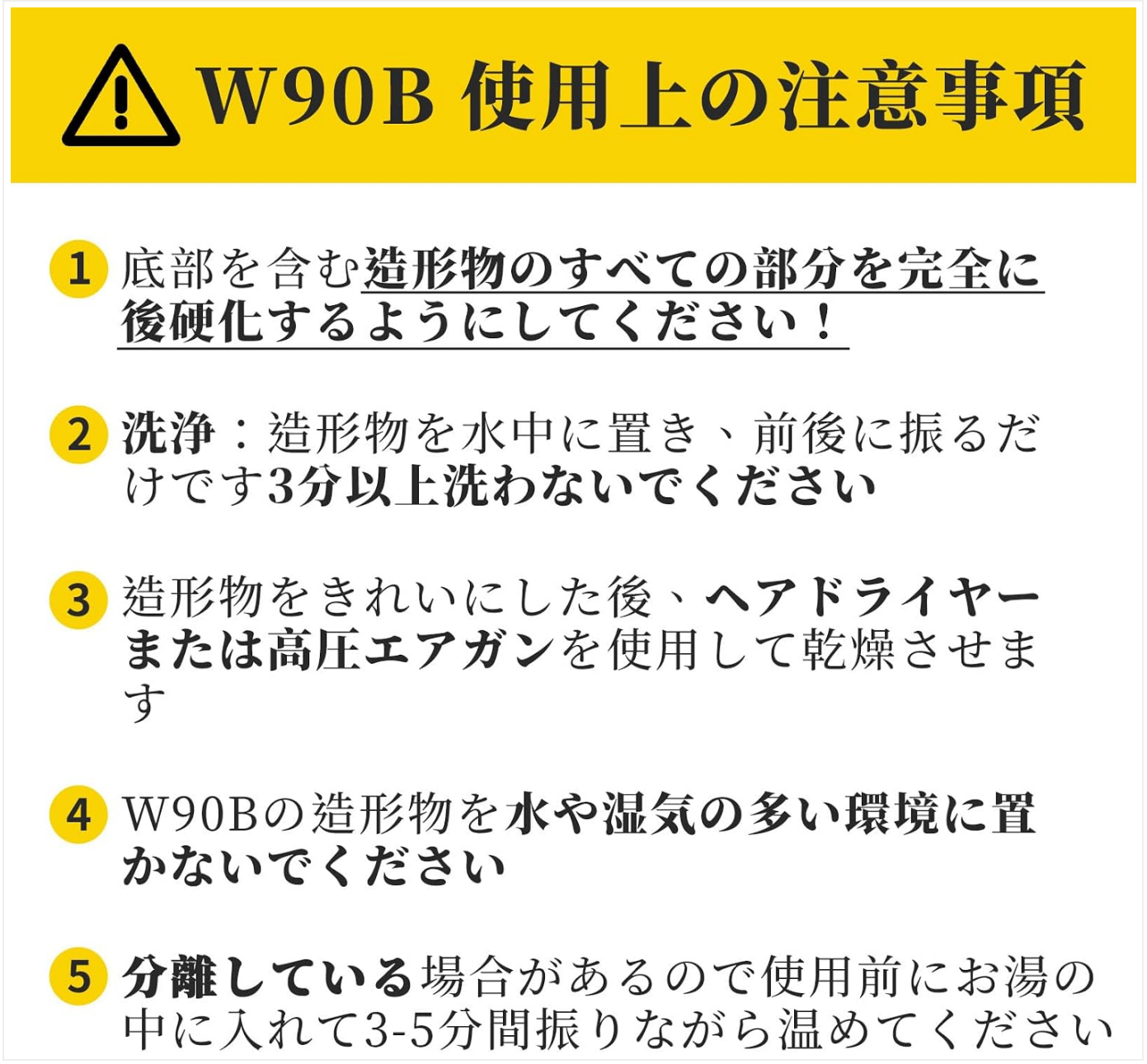

Image: A gloved hand pouring RESIONE W90B resin into a blue resin vat, demonstrating its low viscosity.

Operating Instructions

Follow these steps for successful 3D printing with RESIONE W90B resin:

1. **Printing:** Initiate the printing process on your 3D printer. The resin supports light supports and offers a fast printing speed with a high success rate.
2. **Cleaning Printed Parts:** After printing, remove the parts from the build plate. Place the printed parts in water and gently shake them back and forth for a maximum of 3 minutes. The water-soluble nature of W90B resin allows for easy cleaning of liquid residues. Do not discharge the cleaned waste liquid into the sewer; use a container under the faucet for collection and proper disposal.
3. **Drying:** After cleaning, use a hair dryer or high-pressure air gun to thoroughly dry the printed parts.
4. **Post-Curing:** It is crucial to fully post-cure all parts of the print, including the bottom, to achieve optimal strength and durability. Post-curing enhances the toughness and prevents cracking.

[redacted]

Video: Demonstrates the low viscosity of RESIONE W90B resin, its good fluidity, and the ease of cleaning printed parts with water. It also

shows the resin's improved toughness after post-curing compared to other water-washable resins.

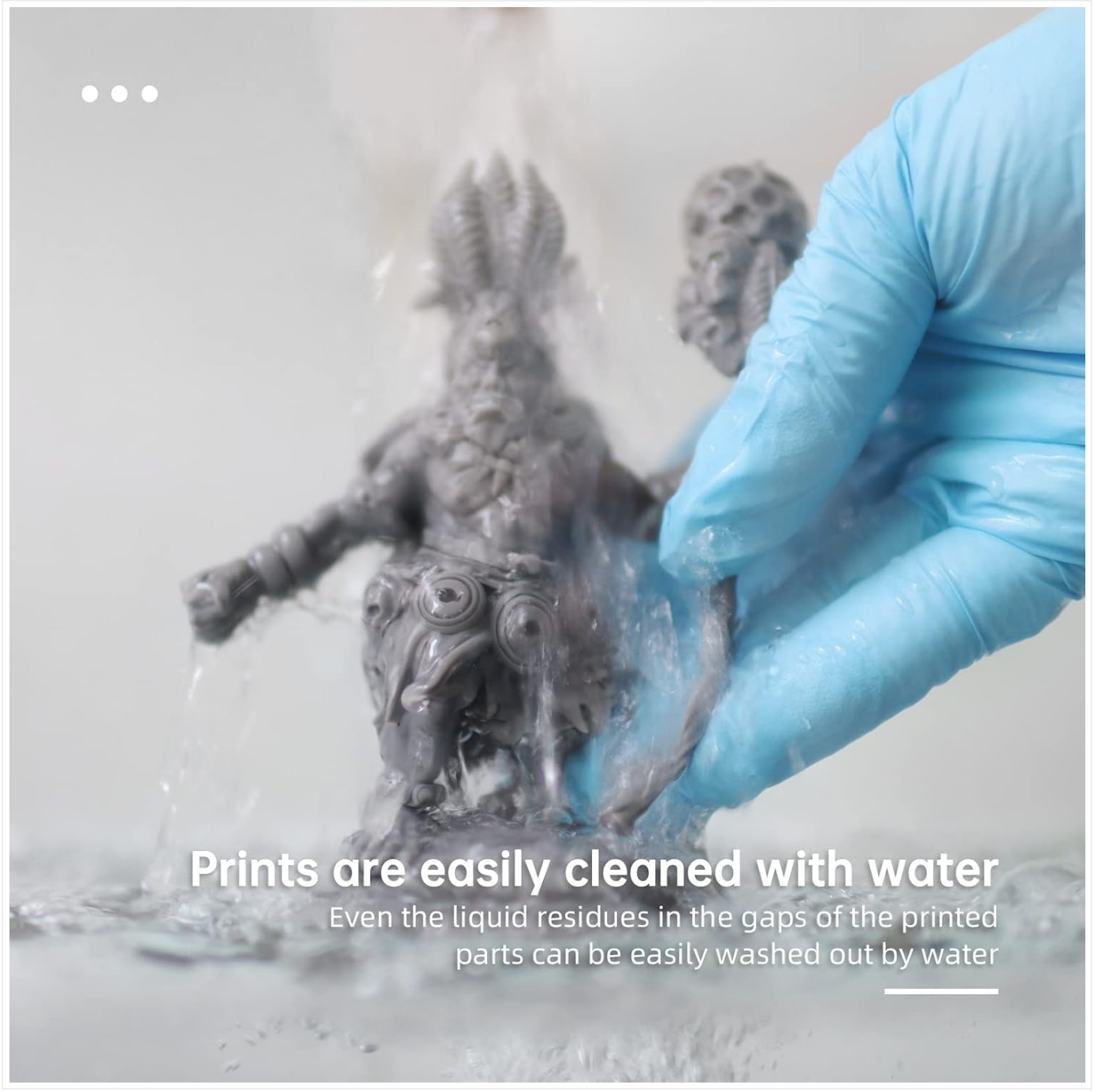

Image: A 3D printed part being cleaned under running water by a gloved hand, illustrating the water-washable feature of the resin.

Maintenance and Storage

Proper maintenance and storage ensure the longevity and quality of your RESIONE W90B resin:

- **Resin Storage:** Store the resin in its original sealed bottle in a cool, dark place. Avoid exposure to direct sunlight or UV light, which can cure the resin prematurely.
- **Unused Resin:** If resin remains in the vat after printing and will not be used for more than 24 hours, filter it to remove any cured particles and return it to a separate, clean, opaque container. Do not mix filtered resin with fresh resin in the original bottle.
- **Printed Parts Storage:** Do not place W90B prints in water or humid environments for extended periods after post-curing.

- **Shelf Life:** The resin has a shelf life of 2 years from the manufacturing date. While labels may state 1 year, the actual shelf life is 2 years.



Image: A note clarifying the resin's shelf life, stating it is 2 years despite some labels indicating 1 year.

Troubleshooting

Here are solutions to common issues encountered during 3D printing with RESIONE W90B resin:

Issue	Possible Cause	Solution
Prints are brittle or crack easily.	Insufficient post-curing.	Ensure all parts of the print, especially the bottom, are fully post-cured. Increase post-curing time if necessary.
Prints fail to adhere to the build plate.	Incorrect bottom exposure time, build plate not level, or old resin.	Adjust bottom exposure settings. Re-level the build plate. Ensure resin is within its shelf life and properly mixed.
Resin cures in unwanted areas (e.g., small holes).	Over-exposure or resin trapped in low-slope areas.	Reduce exposure time slightly. Design prints with better drainage or larger holes.
Prints appear slimy or incomplete.	Incorrect exposure settings, resin contamination, or expired resin.	Verify and adjust exposure settings. Filter resin for contaminants. Do not use resin past its expiration date.
Prints yellow after curing.	Natural characteristic of some transparent resins, or over-curing.	While some slight yellowing can occur, ensure not to over-cure. For pure clear appearance, consider applying a gloss clear varnish.

Specifications

- **Brand:** RI RESIONE
- **Model:** W90B
- **Material Type:** UV-Curing Photopolymer Resin
- **Color:** Transparent Blue (other colors may be available)
- **Wavelength:** 405nm

- **Net Weight:** 500g (approx. 1.1 pounds)
- **Key Features:** Water Washable, Low Odor, Good Notched Impact Strength, Good Elongation at Break, Low Viscosity, Good Fluidity.
- **UPC:** 799890577531

Warranty Information

RESIONE W90B Water Washable 3D Printer Resin is manufactured to high-quality standards. For specific warranty details regarding product defects or performance issues, please refer to the official RESIONE website or contact customer support directly. The shelf life of the resin is 2 years from the manufacturing date, provided it is stored correctly.

Customer Support

For further assistance, technical support, or inquiries regarding RESIONE W90B resin, please visit the official RI RESIONE Store or contact their customer service department. You can find more information and contact details on the RI RESIONE Store page.

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

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