

RI RESIONE TH-BJD

RESIONE TH-BJD Tough 3D Printer Resin Instruction Manual

Model: TH-BJD

1. INTRODUCTION

This manual provides essential information for the safe and effective use of RESIONE TH-BJD Tough 3D Printer Resin. This resin is specifically formulated for printing Ball-Jointed Dolls (BJD) and other articulated figures, offering enhanced durability, wear resistance, and aesthetic qualities. Please read this manual thoroughly before use.



Image 1.1: RESIONE TH-BJD Tough 3D Printer Resin bottle alongside a sample BJD head printed with the resin.

2. SAFETY INFORMATION

WARNING: 3D printer resins are chemical products. Always follow safety guidelines to prevent injury or adverse reactions.

- **Personal Protective Equipment (PPE):** Always wear chemical-resistant gloves (nitrile or neoprene) and safety glasses when handling liquid resin. A respirator with organic vapor cartridges is recommended, especially in poorly ventilated areas.
- **Ventilation:** Use resin in a well-ventilated area to minimize exposure to fumes.
- **Skin Contact:** Avoid direct skin contact. If resin comes into contact with skin, wash immediately and thoroughly with soap and water. Do not use alcohol or solvents to clean skin.
- **Eye Contact:** In case of eye contact, flush immediately with plenty of water for at least 15 minutes and seek medical attention.
- **Ingestion:** Do not ingest. If swallowed, do not induce vomiting. Rinse mouth and seek immediate medical attention.
- **Disposal:** Dispose of uncured liquid resin and contaminated materials (e.g., paper towels, gloves)

according to local regulations. Cured resin is generally safe for disposal as regular plastic waste. Never pour liquid resin down drains.

- **Storage:** Store resin in its original opaque bottle, tightly sealed, in a cool, dry, dark place, away from direct sunlight and heat sources. Keep out of reach of children and pets.

3. PRODUCT FEATURES

RESIONE TH-BJD resin offers several key advantages for BJD and articulated figure printing:

- **Optimized for BJD:** Specifically developed for BJD and articulated models, ensuring precise joint fit and excellent scratch and wear resistance. This prevents powdering or loosening from frequent movement.
- **Minimal Seams:** Designed to minimize seams, particularly on BJD heads, enhancing the overall aesthetic appeal.
- **Non-Yellowing Colors:** Available in multiple BJD-matched colors that resist yellowing over long-term storage, preserving print vibrancy.
- **High Toughness and Drop Resistance:** Possesses ABS-like toughness and durability, making prints resistant to accidental bumps, drops, and daily handling without cracking. Delicate parts remain intact even during transport.
- **Easy to Clean and Thinner Resistant:** Prints can be cleaned quickly without sticky residue. The resin is resistant to thinners, allowing for repeated makeup application and removal on BJD without damage.
- **Smooth Surface and Stable Printing:** Unique formula ensures stable printing, supports 0.03mm layer height, and produces smooth, delicate surfaces closely resembling traditionally manufactured products. Details like eye and mouth seams are more defined.

Specially designed for BJD▼



• Accurate Shape •

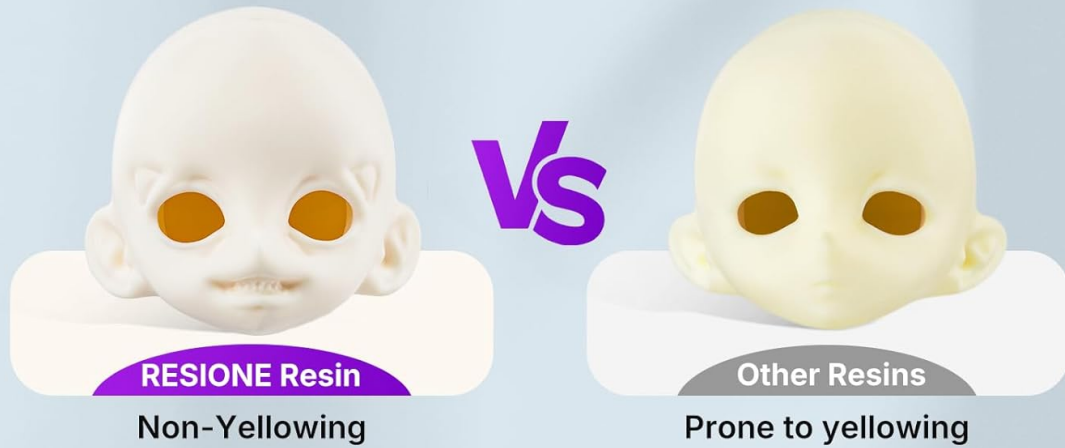


Scratch and Wear Resistance
with no powder

Model by 婵娜

Image 3.1: A printed BJD figure demonstrating accurate shape and joint integrity, highlighting scratch and wear resistance.

Multiple BJD Colors Non-Yellowing



Multiple Colors



Model by 婵娜

Image 3.2: Visual comparison illustrating RESIONE resin's non-yellowing properties against other resins that may yellow over time, showcasing various BJD-matched colors.

Crack-resistant over time Tough, Drop-resistant



Image 3.3: An illustration depicting a BJD figure falling, emphasizing the resin's crack-resistant and drop-resistant characteristics.

4. SETUP AND PREPARATION

4.1 Before Printing

1. **Shake the Bottle:** Before each use, thoroughly shake the resin bottle for at least 1 minute to ensure all components are well mixed.
2. **Printer Calibration:** Ensure your 3D printer (LCD, DLP, or MSLA) is properly calibrated and the build plate is leveled.
3. **Temperature:** Optimal printing temperature is typically between 20-30°C (68-86°F). Printing in a stable temperature environment helps achieve consistent results.
4. **Pour Resin:** Carefully pour the desired amount of resin into the printer's resin vat. Avoid overfilling.

5. OPERATING INSTRUCTIONS

5.1 Slicer Settings

Specific exposure settings will vary depending on your 3D printer model, screen type (mono/RGB), and layer height. It is recommended to consult your printer manufacturer's guidelines or RESIONE's official website for recommended settings for TH-BJD resin.

- **Layer Height:** This resin supports fine layer heights, such as 0.03mm, for detailed prints.
- **Bottom Exposure Time:** Typically higher than normal layer exposure to ensure strong adhesion to the build plate.
- **Normal Exposure Time:** Adjust based on your printer and desired detail. Start with recommended settings and fine-tune using calibration prints.
- **Lift Speed:** A slower lift speed can help reduce layer separation issues and improve print success rates, especially for larger or more complex models.

5.2 Printing Process

1. Load your prepared 3D model (sliced file) onto your printer.
2. Initiate the printing process. Monitor the first few layers to ensure proper adhesion.
3. Once printing is complete, carefully remove the build plate from the printer.

Smooth Surface, Stable Printing



Model by 婵娜

Image 5.1: A BJD head demonstrating the smooth surface quality achievable with RESIONE TH-BJD resin, contrasting with examples of rough or flawed prints.

6. POST-PROCESSING

6.1 Cleaning

1. **Remove Print:** Carefully detach the printed model from the build plate using a plastic scraper to avoid damage.
2. **Wash:** Immerse the print in Isopropyl Alcohol (IPA) with a concentration of 95% or higher, or a dedicated resin cleaner. Gently agitate or use an ultrasonic cleaner for 2-5 minutes to remove uncured resin.
3. **Rinse:** Rinse the cleaned print with fresh IPA or resin cleaner.
4. **Dry:** Allow the print to air dry completely or use compressed air. Ensure no liquid resin or IPA remains on the surface.



Image 6.1: A BJD head partially submerged in water, symbolizing the resin's easy-to-clean properties and resistance to thinners, which is beneficial for BJD customization.

6.2 Curing

1. **Remove Supports:** If applicable, carefully remove supports from the print before final curing.

2. **Post-Cure:** Place the cleaned and dried print in a UV curing chamber or under direct sunlight. Curing times vary based on the UV light intensity and model thickness. Typically, 5-15 minutes in a UV curing station is sufficient. Ensure all surfaces are exposed to UV light for even curing.
3. **Inspect:** After curing, the print should feel hard and non-tacky.

7. MAINTENANCE AND STORAGE

- **Resin Storage:** Store unused resin in its original opaque bottle, tightly sealed, in a cool, dry, dark place, away from direct sunlight and heat.
- **Resin Vat:** If you have uncured resin remaining in the vat after printing, you can filter it back into the bottle using a mesh filter to remove any cured particles. Cover the vat to protect it from light if leaving resin in it for short periods.
- **Printer Cleaning:** Regularly clean your 3D printer according to the manufacturer's instructions to ensure optimal performance and longevity.

8. TROUBLESHOOTING

Common issues and potential solutions:

Problem	Possible Cause	Solution
Print fails to adhere to build plate	Insufficient bottom exposure, build plate not leveled, low room temperature.	Increase bottom exposure time, re-level build plate, ensure room temperature is within optimal range.
Prints are brittle or soft	Under-cured, insufficient normal exposure time.	Increase normal exposure time, ensure thorough post-curing.
Sticky or tacky surface after cleaning/curing	Incomplete washing, insufficient post-curing.	Wash thoroughly with fresh IPA, ensure complete drying, increase post-curing time.
Layer lines or poor detail	Incorrect normal exposure, unstable printer, worn FEP film.	Adjust normal exposure, check printer stability, inspect and replace FEP film if necessary.

9. SPECIFICATIONS

Attribute	Detail
Product Name	RESIONE TH-BJD Tough 3D Printer Resin
Model	TH-BJD
Color (Current Variant)	Bronze
Weight	1KG (2.2 lbs)
Compatibility	LCD, DLP, MSLA 3D Printers

Attribute	Detail
Key Features	Wear-resistant, Non-yellowing, Drop-resistant, ABS-like toughness, Easy to clean, Thinner resistant
Manufacturer	RI RESIONE
Package Dimensions	9.84 x 3.94 x 3.94 inches

10. WARRANTY AND SUPPORT

Specific warranty information for RESIONE TH-BJD Tough 3D Printer Resin is not provided in this manual. For detailed warranty terms, technical support, or further inquiries, please refer to the official RI RESIONE website or contact their customer service directly.

You can visit the RI RESIONE Store for more information:[RI RESIONE Store on Amazon](#)

11. OFFICIAL PRODUCT VIDEOS

No official product videos with 'Seller' as creator type were found in the provided product data. Please refer to the manufacturer's official channels for any available video resources.