

BLUECAST X-WAX®

X-Wax: More Than a **Castable Resin** — A Game-Changer for Jewelry and 3D Printing

X-Wax is a technical product designed for professional use by experienced users. Please read this guide in its entirety before proceeding with printing.

PRODUCT FEATURES

Step into the future of jewelry 3D printing with X-Wax, the groundbreaking resin that's redefining quality and reliability. X-Wax is the first castable resin for LCD printing (also compatible with DLP printers) that contains over 80% real investment casting wax. Developed through years of research and innovation, X-Wax represents a paradigm shift in micro-casting: it's not just like wax, it is wax, designed to simplify and enhance every step of your production process.

Key Features

True Liquid Wax for 3D Printing: With its exceptionally high wax content, X-Wax stands in a league of its own, unlike any other castable resin on the market.

Superior Castability: Boasting over 80% real micro-casting wax, X-Wax performs just like traditional wax models, ensuring outstanding results.

Universal Compatibility: Seamlessly integrates with all casting investments and burnout cycles.

Flawless Burnout: Leaves absolutely no ash or residue behind, ensuring clean castings.

Absolute Precision: Guarantees dimensional stability with zero shrinkage or expansion, maintaining intricate details.

Effortless Printing: This is the first wax-based castable resin that's compatible with all LCD and DLP printers, making it incredibly easy to use.

Minimal Bleeding: Achieve clean, sharp results without any resin buildup.

Enhanced User Experience: Enjoy a more pleasant working environment thanks to minimal odor and fumes during both printing and burnout.

Simplified Post-Processing: A quick alcohol wash is all it takes to get professional-grade results.

Health-Conscious: Formulated with materials that are not classified as hazardous, prioritizing your safety.

Environmentally Friendly: Over 80% of its composition is natural wax, significantly reducing its environmental footprint from production to disposal.



- Compatible with 405 and 385 nu UV lights. X-Wax was optimized for 405nm and 385nm UV light to offer the best performance with any 3D printer. The 385nm UV wavelength has lower penetration, enabling precise control over resin curing depth

QUICK START GUIDE FOR LCD PRINTERS

Following informations are suitable only for X-Wax **castable resin** and will not apply to other BlueCast resins.

BlueCast X-Wax resin is fully compatible with the new monochromatic LCD Generation and DLP printers. With certain machines that tilt the tank, printing can be challenging because it's not possible to manage the "waiting time before print". In this case the use of ACF can be helpful.

Baseline Printing Settings for Monochrome LCD Printers

Layer Height – 0.03 mm

Bottom Layer count – 10

Bottom Exposure Time – 30

Layer Exposure Time – 8.0 s

Rest Time Before Print – 1 s

Bottom layer speeds – 50 mm/min

layer speeds – 150 mm/min

For accurate printing parameters, please visit: Chitubox profile

Printing Preparation

As it is made primarily of wax, X-Wax castable resin can solidify during storage. Here's how to prepare it:

1. Before opening the bottle, it is necessary to warm the product for 5 minutes at a temperature between 30 and 40 degrees Celsius.

PAY ATTENTION, heating the resin above 60 degrees Celsius can irreversibly damage it. The manufacturer is not responsible for an incorrect use of the product.

- 2. Shake the bottle vigorously for about 1 minute to ensure optimal mixing.
- 3. Use PFA films with a thickness of 127 microns or less to maximize the resolution of modern 3D printers.
- 4. For printers that have a vat tilt mechanism, it is suggested to use an ACF film.
- 5. Ensure the printer is placed in an environment with temperatures between 18/20°C and 45°C. THE OPTIMAL OPERATING RANGE IS BETWEEN 25°C and 35°C



- 6. To prevent wax solidification during printing, it is recommended to use a heated resin tank or a printer with a heated chamber (30° Celsius).
- 7. There are several ways to warm the bottle before printing. The safest method is to use a baby bottle warmer at a temperature of 40°C or an ultrasonic cleaner.

Storing the closed bottles should be done at a temperature between 10 and 25 degrees Celsius.



A simplified process for superior results

X-Wax is designed for simplicity and efficiency. A double alcohol wash for a total of 10 minutes, followed by air drying (cold compressed air), is all you need. No lengthy UV curing, glycerin baths, or boiling models in water - just simplicity combined with perfection.

POST-PRINTING CLEANUP AND TREE PREPARATION

- 1. Wash the patters in IPA alcohol or Ethyl alcohol for 5 minutes.
- 2. Blow the prints with compressed air to remove excess uncured resin.
- 3. Perform a second wash in IPA clean alcohol for 3 minutes, then dry the prints again with compressed air.
- 4. For a more thorough cleaning, you can use 3D wash stations or ultrasonic cleaners.
- 5. Allow the models to rest for at least 15-20 minutes before assembling the casting tree.

The washing is also effective with ethyl alcohol.

X-Wax is also compatible with BlueCast Liquid Curing.

- 1. Wash the patterns in BlueCast Liquid Curing for 10 minutes.
- 2. Blow the prints with compressed air to remove any excess uncured resin.
- 3. Rinse the model with water, then dry the prints again using compressed air.