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ELEGOO RESIN2

ELEGOO Standard Photopolymer Resin User Manual

Model: RESIN2 (Black, 1000g)

1. INTRODUCTION

This manual provides essential instructions for the safe and effective use of ELEGOO Standard Photopolymer Resin. This 405nm UV-curing resin is designed for LCD, MSLA, and DLP 3D printers, offering reliable performance for various printing applications. Please read this manual thoroughly before use to ensure optimal results and safety.



Image 1.1: ELEGOO Standard Photopolymer Resin (Black) and an example 3D print.

2. SAFETY PRECAUTIONS

Handling photopolymer resin requires adherence to specific safety guidelines to prevent adverse reactions and ensure a safe working environment.

- **Wear Protective Gear:** Always wear gloves (nitrile recommended) and a mask (respirator with organic vapor cartridges) to avoid direct skin contact and inhalation of fumes.
- **Ventilation:** Use the resin in a well-ventilated area to minimize exposure to odors and fumes.
- **Temperature Control:** Maintain a recommended ambient temperature of 20°C - 25°C (68°F - 77°F) for optimal resin performance and safety.
- **Avoid Direct Sunlight:** Store resin away from direct sunlight and UV light sources, as this can cause premature curing.
- **Emergency Contact:** In case of skin contact, wash immediately and thoroughly with plenty of soap and water. If irritation persists, seek medical attention. For eye contact, flush with water for at least 15 minutes and seek immediate medical attention.
- **Keep Away from Children:** Store resin out of reach of children and pets.



Shake well before use

- Recommended temperature
20°C - 25°C
- Wear gloves and mask to avoid
direct skin contact
- Keep away from children, dust
and direct sunlight
- Wash with plenty of water immediately
if you get direct skin contact with resin



Image 2.1: Important safety and usage guidelines for ELEGOO resin.

3. PRODUCT OVERVIEW

ELEGOO Standard Photopolymer Resin is a high-quality liquid resin formulated for 3D printing. It cures under 405nm UV light, making it compatible with most LCD, MSLA, and DLP 3D printers. This resin offers good detail, smooth finishes, and stable performance for a wide range of models.

3.1 Compatibility

This resin is suitable for 3D printers utilizing UV light source technology, including but not limited to ELEGOO Mars, Anycubic Photon, Zortrax Inkspire, SparkMaker, Phrozen Shuffle, and Monoprice MP Mini.



Image 3.1: ELEGOO resin compatibility with various 3D printers using UV light source technology.

4. SETUP AND PREPARATION

- 1. Shake the Bottle:** Before each use, thoroughly shake the resin bottle for at least 30 seconds to ensure all components are well mixed. This is crucial for consistent print quality.
- 2. Environmental Conditions:** Ensure your printing environment is within the recommended temperature range of 20°C - 25°C (68°F - 77°F). Extreme temperatures can affect resin viscosity and curing properties.
- 3. Pouring Resin:** Carefully pour the desired amount of resin into your printer's resin vat. Avoid overfilling.



Image 4.1: The production date is printed on the resin bottle label.

5. OPERATING INSTRUCTIONS (PRINTING GUIDELINES)

The following settings are recommended starting points for the ELEGOO Mars printer. Optimal settings may vary depending on your specific printer model, ambient temperature, and desired print quality. Always perform calibration prints to fine-tune your settings.

- **Bottom Exposure Time:** 70 seconds
- **Normal Exposure Time:** 13-15 seconds

For other printer models, consult your printer's manufacturer guidelines or community-shared settings for 405nm standard photopolymer resins.



Recommended Settings

Bottom Exposure: 70S

Normal Exposure: 13–15S



Image 5.1: Recommended exposure settings for ELEGOO Mars printer.

6. POST-PROCESSING AND CURING

- 1. Remove Print:** Carefully remove the printed model from the build plate using a scraper.
- 2. Wash:** Clean the printed model thoroughly with 95% (or higher) isopropyl alcohol (IPA) or a specialized resin cleaner. Use a soft brush if necessary to remove uncured resin from crevices.
- 3. Dry:** Allow the model to air dry completely or use compressed air. Ensure no residual alcohol remains.
- 4. Post-Cure:** Place the dried model under a 405nm UV light source for final curing. Curing times vary depending on the size and complexity of the model, typically ranging from a few minutes to an hour. Ensure all surfaces are exposed to UV light.



Image 6.1: Example of a detailed 3D print after post-processing.



Image 6.2: Another example of a 3D printed model.

7. MAINTENANCE AND STORAGE

- **Resin Storage:** Store unused resin in its original opaque bottle, tightly sealed, in a cool, dry, and dark place. Avoid exposure to direct sunlight or any UV light source.
- **Temperature:** Maintain storage temperature between 15°C - 35°C (59°F - 95°F).
- **Disposal:** Do not pour liquid resin down the drain. Cure any leftover liquid resin under UV light until solid, then dispose of it as solid plastic waste according to local regulations.
- **Cleaning the Vat:** After printing, filter any remaining resin in the vat back into the bottle using a fine mesh filter to remove cured particles. Clean the resin vat with IPA if changing resin types or for long-term storage.



Image 7.1: Recommended storage conditions for ELEGOO resin.



Image 7.2: ELEGOO resin packaging.

8. TROUBLESHOOTING

If you encounter issues during printing, consider the following common troubleshooting steps:

- **Failed Prints/Poor Adhesion:**

- Ensure the build plate is properly leveled and clean.
- Increase bottom exposure time.
- Verify the ambient temperature is within the recommended range.
- Check for FEP film damage or cloudiness in the resin vat.

- **Soft/Under-cured Prints:**

- Increase normal exposure time.
- Ensure the UV light source is functioning correctly.
- Confirm proper post-curing procedures.

- **Brittle Prints:**

- Reduce normal exposure time slightly.
- Avoid over-curing during post-processing.

- **Resin Not Mixing Properly:**

- Shake the resin bottle thoroughly before use.
- Ensure resin is stored at the correct temperature.

9. SPECIFICATIONS

Attribute	Value
Brand	ELEGOO
Model Number	RESIN2
Color	Black
Volume	1000g
UV Wavelength	405nm
Product Dimensions	2 x 2 x 6 inches
Item Weight	2.75 Pounds
First Available Date	February 27, 2019

10. WARRANTY AND SUPPORT

For warranty information, technical support, or any inquiries regarding your ELEGOO Standard Photopolymer Resin, please visit the official ELEGOO website or contact ELEGOO customer service directly. Ensure you have your product details and purchase information available when seeking support. Official ELEGOO Store: [ELEGOO Store on Amazon](#)