

PROTO | RAPID PROTOTYPING RESIN

1. Product Overview

PROTO™ Rapid Prototyping Resin is designed for professionals who demand precision, speed, and reliability.

Optimised for MSLA printers with advanced LED array technology, it delivers high accuracy with rapid cure times.

This balanced formulation offers excellent detail, smooth surface finish, and durable mechanical performance.

Ideal for producing prototypes, functional models, and concept parts where efficiency and consistency are key.

Available in Shark Grey, Black, and Clear, and compatible with the CustomMix™ System for colour and finish control.

2. Key Features & Benefits

- ✓ Fast-curing formula (2–3 sec layers) for rapid output
- ✓ Excellent surface finish and high detail accuracy
- ✓ Durable and stable for repeated testing
- ✓ Simple, reliable performance on MSLA printers
- ✓ Compatible with CustomMix™ additives and toners
- ✓ Low odour and easy cleanup with ResinAway®

3. Applications

- ★ Professional prototyping and model development
- ★ Concept design validation and product testing
- ★ Functional component mock-ups
- ★ Rapid iteration and short production runs
- ★ Hobby and tabletop gaming models

4. Physical Properties

Property	Value	Test Method
Viscosity @ 25 °C	500 cPs	ASTM D2196
Odour	1. Low	VDA 270
Shelf Life	36 months	Internal QC
Optimal UV Cure	405 nm	Internal
Cure Speed	Fast (2–3 sec layers)	Internal
Tensile Strength (MPa)	47	ASTM D638
Elongation at Break (%)	3.0	ASTM D638
Young’s Modulus (GPa)	1.80	ASTM D638
Shore Hardness (D)	75	ASTM D2240
Heat Deflection Temp (°C)	55 @ 0.45 MPa	ASTM D648

5. Printer Compatibility

- MSLA resin printers
- Curing wavelength 365–405 nm
- Tested with Phrozen, Anycubic, Elegoo, Creality, Uniformation, and many more!

10. Disclaimer

The information provided in this Technical Data Sheet is based on laboratory testing and intended as a general guideline. Actual results may vary depending on printing conditions, curing methods, and environmental factors. Monocure3D assumes no liability for improper use of this product.

6. Printing & Post-Processing Guidelines

Tested with: Anycubic M7 / Phrozen Mini 8K

Layer thickness 50–100 µm
Base layer exposure 25–30 seconds
Normal exposure 2–3 seconds
Lift speed 70 mm/s
Lift height 8–12 mm



(Refer to printer settings database)

Post-Processing Steps

1. Wash in ResinAway® or IPA immediately after printing
2. Ultrasonic clean in ResinAway® for 5–10 minutes
3. Dry with compressed air or air-dry naturally
4. UV cure for at least 1 hour (recommend)
5. Final rinse with fresh water
6. Avoid storing model in high-temp areas

7. Health & Safety Information

- Not for intended for intraoral or direct food contact use.
- Use in a ventilated area. Avoid skin & eye contact.
- If contact occurs, wash thoroughly with soap and water.
- Refer to SDS (Safety Data Sheet) for complete handling guidelines www.monocure3d.com.au

8. Storage & Handling

- **Storage Temperature:** 10–30°C (Avoid direct sunlight)
- **Shelf Life:** 36 months
- **Handling:** Use recommend red PPE eg. **gloves & safety goggles** when handling liquid resin
- **Disposal:** Follow **local hazardous waste disposal regulations**.

9. Ordering Information

- **Available Sizes:** 1L & 5L UV-safe bottles
- **Where to Buy:** Available through **Monocure3D resellers**
- For technical support or bulk orders, contact:
 support@monocure3d.com.au | www.monocure3d.com.au