

PRO+ | HIGH-PERFORMANCE RESIN

1. Product Overview

PRO+ is a next-generation engineering resin designed for professional use in MSLA and DLP 3D printers. It offers a hard, stable Shore D96 finish with excellent dimensional accuracy, very low warping, and reliable heat resistance. The formula has been optimised to be virtually odourless, making it ideal for confined workspaces and extended printing sessions.

Unlike many other resins, PRO+ is fully compatible with platinum-cured silicones without causing curing inhibition, making it a trusted choice for mould-making and casting workflows. It is also suitable for producing positive tools for sand casting, providing strength and surface stability under foundry conditions.

2. Key Features & Benefits

- ✓ Very low warping for dimensionally stable parts
- ✓ Odourless resin – perfect for confined or shared spaces
- ✓ High Shore D hardness and mechanical strength
- ✓ Compatible with platinum-cure silicones (no inhibition issues)
- ✓ Can be used for positive tools in sand casting
- ✓ Smooth surface finish and high detail resolution
- ✓ Reliable, easy-to-print, professional-grade material

3. Applications

- ★ Positive masters for sand casting
- ★ Moulds and models for platinum-cure silicone casting
- ★ Engineering prototypes, jigs, and fixtures
- ★ Study models
- ★ Fit-check parts and research tools
- ★ Creative and educational applications

4. Physical Properties

Property	Value	Test Method
Viscosity @ 25°C	400-600cps	ASTM D2196
Odour	Extremely Low	VDA 270
Shelf Life	36 months	Internal QC
Optimal UV Cure	405 nm	Internal QC
Cure Speed	~2.5 sec/layer	Internal QC
Tensile Strength (MPa)	68	ASTM D638
Elongation at Break (%)	3.8	ASTM D638
Young's Modulus (GPa)	0.95	ASTM D638
Shore Hardness (D)	96	ASTM D2240
Heat Deflection Temp	81°C @ 0.45 MPa	ASTM D648

5. Printer Compatibility

- MSLA and DLP resin printers
- Curing wavelength 365–405 nm
- Tested with Phrozen, Anycubic, Elegoo, Asiga, SprintRay

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 35–45 seconds
Normal exposure 2.5–4 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
5. Optional heat cure at 60°C for 1 hour (preferred for casting use)
6. Final rinse with fresh water

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