

TRAY BIOCOMPATIBLE RESIN

ARTG: No. 398012

1. Product Overview

Custom Tray Resin is a biocompatible, high-strength dental resin designed for 3D printing individual impression trays for implants, dentures, crowns, and bridges.

The solid aqua colour provides excellent visibility and contrast. It offers fast printing, smooth surface finish, and precise fit.

The cured material is durable and dimensionally stable, compatible with a wide range of impression materials. Developed for consistent, accurate results across both MSLA and DLP printers.

2. Key Features & Benefits

- ✓ Biocompatible (Class I) for temporary intraoral use
- ✓ High-strength and durable formula
- ✓ Fast print speed with low odour
- ✓ Excellent dimensional accuracy
- ✓ Solid aqua colour for better definition
- ✓ Autoclavable after full post-cure
- ✓ Compatible with MSLA and DLP dental printers

3. Applications

- Custom impression trays for implants and dentures
- Crown and bridge impression trays
- Laboratory and chairside applications
- Prosthetic and restorative tray fabrication

4. Physical Properties

Property	Value	Test Method
Appearance	Solid Aqua	Visual
Odour	1. Low	VDA 270
Tensile Strength (MPa)	47	ASTM D638
Viscosity @ 25°C cP	700	ASTM D2196
Density g/cm³	1.1	ASTM D792
Hardness (Shore D)	84	ASTM D2240
Flexural Stress (MPa)	120	ASTM D790
Elongation at Break	3.0%	ASTM D638
Heat Deflection Temp	130°C @ 0.45MPa	ASTM E1356

5. Printer Compatibility

- Compatible with MSLA & DLP 3D Printers
- Asiga, SprintRay, Phrozen, Anycubic, Elegoo, and more
- Curing wavelength: 365–405nm UV

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

Printing Parameters

Layer Thickness: 50–150µm
Base Layer Exposure: 30 seconds
Normal Layer Exposure: 2-3 seconds
Lift Speed: 80 mm/s
Lift Height: 10 mm



(Refer to printer settings database)

Post-Processing Steps

1. Pre-wash in ResinAway® & brush to remove excess resin
2. Submerge in ResinAway® in Ultrasonic for 5-10 minutes.
2. Dry the Model – Allow to air-dry or use compressed air.
3. Post-Cure – UV cure for 30-60 minutes.
4. OTTOFLASH G171: 2,000 flashes (recommended)
5. Final Finishing – Rinse with Fresh Water.

7. Health & Safety Information

- Biocompatible Class I (not for permanent intraoral 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