



1. Product Overview

Monocure3D Denture Base Resin is a clear photopolymer base resin for producing 3D printed denture bases with DLP and MSLA dental printers. It provides a consistent foundation for customised gingival shades using the [TrueShade™ Denture Base Colour System](#).

2. Key Features & Benefits

- ✓ Clear base resin for controlled gingival colour
- ✓ Dedicated DLP and MSLA formulations
- ✓ Compatible with the TrueShade™ Colour System
- ✓ Four repeatable shades that can be blended
- ✓ Available in 1 kg and 5 kg UV-safe bottles

3. Applications

- Full denture bases
- Partial denture bases
- Immediate dentures
- Digital denture workflows
- Removable prosthetic appliances

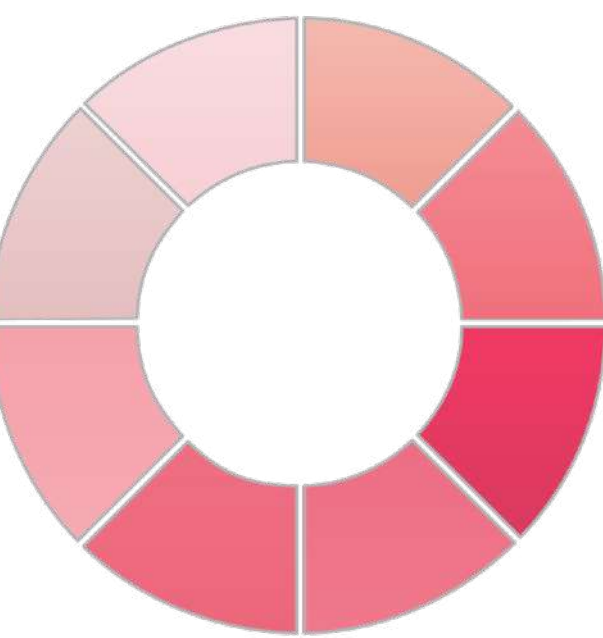
4. Physical Properties

Property	Value	Test Method
Appearance	Clear	Visual
Odour	Low	VDA 270
Tensile Strength	61–72 MPa	ASTM D790
Flexural Strength	48 MPa	ASTM E1356
Elongation at Break	20%	ASTM D638
Viscosity @ 25°C	700 cP	ASTM D2196
Density	1.1 g/cm³	ASTM D792
Hardness	Shore D 92	ASTM D2240
Flexural Modulus	>2,500 MPa	ASTM D790

The addition of TrueShade™ Toner at the recommended 5% to 10% concentration does not significantly alter the physical or mechanical performance of the cured Denture Base Resin.

5. Resin & Printer Compatibility

DLP Clear Base: for compatible DLP dental printers.
MSLA Clear Base: for compatible MSLA dental printers.



The TrueShade™ Toner system is universal and works with both formulations. Use the recommended printer profile for the selected resin and printer.

6. Printing & Post-Processing

PRINTING

Use the recommended Monocure3D printer profile for the selected DLP or MSLA Denture Base Resin.

WASH

Use a two-stage ResinAway® wash to remove uncured resin, followed by a final RinseOFF™ wash.

DRY

Dry completely with clean compressed air. Pay close attention to recesses, tooth sockets and internal areas.

POST-CURE

Post-cure under 405 nm UV light for 45 minutes. Vacuum, nitrogen or submerging in glycerine is optional.

HEAT

Use a lab oven or kitchen dehydrator set at 60°C for 45 minutes for best results

7. Health, Safety & Storage

Use in a well-ventilated area and avoid direct skin or eye contact with uncured resin. If contact occurs, wash thoroughly with soap and water. Refer to the Safety Data Sheet (SDS) for full handling instructions. ARTG listing pending update of declaration of conformity submission.

SHAKE WELL BEFORE EACH USE
STORE IN A COOL, DARK PLACE
KEEP AWAY FROM DIRECT SUNLIGHT

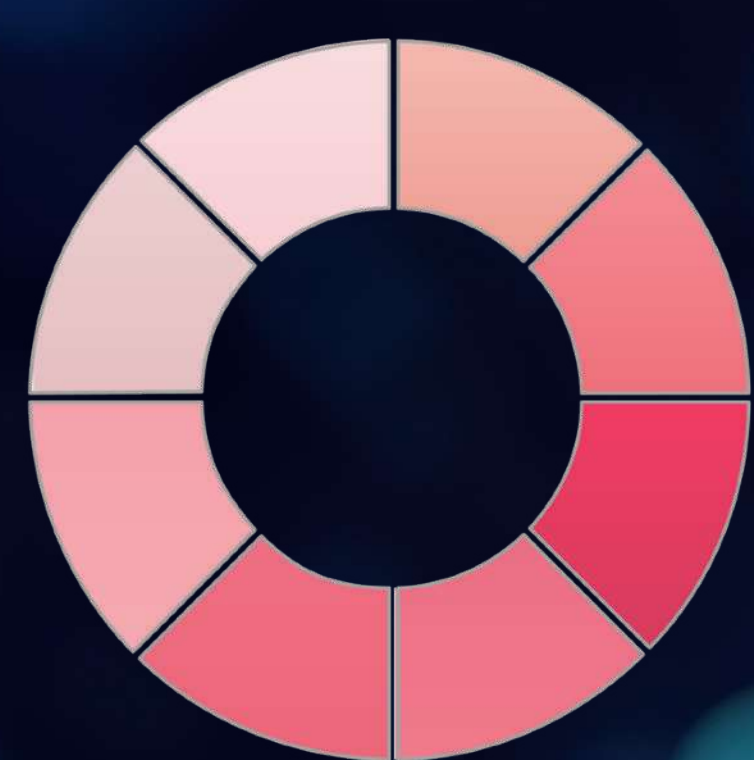
8. Ordering Information

- **Available Sizes:** 500g, 1kg & 5kg 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

9. Disclaimer

The information in this Technical Data Sheet is based on laboratory testing and is intended as a general guideline. Results may vary with printer, mixing accuracy, processing conditions and environment. Follow the current Instructions for Use, Technical Data Sheet and Safety Data Sheet. Monocure3D Pty Ltd and its authorised resellers accept no liability for improper use or failure to follow the recommended processing instructions.



Four pre-formulated gingival shades for Monocure3D DLP and MSLA Clear Denture Base Resins. The shades can be used individually or blended to create intermediate colours.

1. Available Shades

Shade	Name	Description
P1	Light Pink	Light, subtle gingival pink
P2	Natural Pink	Balanced natural gingival pink
P3	Mid Pink	Mid-tone pink with greater colour depth
P4	Dark Pink	Deeper gingival shade with greater intensity

2. Compatibility & Blending

The same TrueShade™ Toner works with both DLP and MSLA Clear Denture Base Resin. Shades may be blended to create intermediate gingival colours. Keep accurate formulation records for repeatable results.

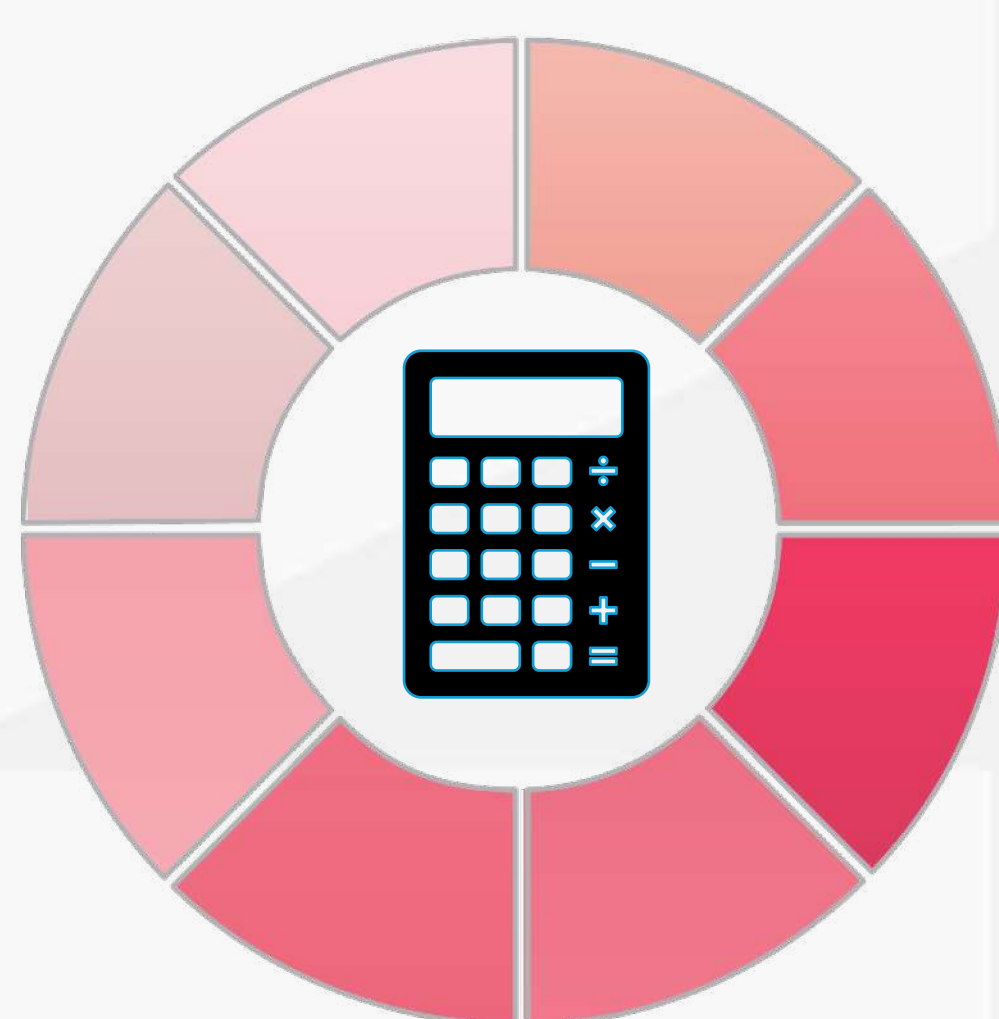
3. Mixing Ratios

To prepare 1 kg of denture base resin, thoroughly mix 900 g of Clear Base with 100 g of TrueShade™ Toner. This represents a mixing ratio of 90% Clear Base to 10% TrueShade™ Toner by weight.

Measuring by weight is recommended instead of volume because the resin has a specific gravity of approximately 1.1, meaning its volume and weight are not equivalent.

4. Online TonerBot Colour Calculator

Use the online [TrueShade™ TonerBot Dental Colour Calculator](#) to determine the exact Clear Base and TrueShade™ Toner weights required for any finished quantity and selected toner concentration.

[TonerBot Calculator](#)

PROTIP

TrueShade™ Toners can be blended to create custom colours. Begin with a small test batch, approximately 100g in a clear, clean plastic mixing cup.

Accurately weigh and record each toner component so the formula can be reproduced. Mix thoroughly, then hold the cup up to a suitable light source to assess the colour and opacity. The uncured mixture closely represents the final cured colour, allowing adjustments to be made before preparing a larger batch.

5. Mixing Guidance

1. SHAKE WELL

Shake the TrueShade™ Toner and clear BASE resin thoroughly before measuring.

2. WEIGH ACCURATELY - USE SCALES

Weigh the Clear Denture Base Resin and toner for the required finished quantity.

3. MIX THOROUGHLY

Scrape the sides and bottom until the colour is completely uniform. Minimise air incorporation.

4. SETTLE AND FINAL MIX

Allow bubbles to settle, then mix gently once more before pouring into the printer vat.

6. Health, Safety & Storage

Use in a well-ventilated area and avoid direct skin or eye contact with uncured resin. If contact occurs, wash thoroughly with soap and water. Refer to the Safety Data Sheet (SDS) for full handling instructions. ARTG listing pending update of declaration of conformity submission.

7. Ordering Information

- **Available Sizes:** 500g UV-safe bottles
- **Colours:** P1 Light Pink | P2 Natural Pink | P3 Mid Pink | P4 Dark Pink
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TRUESHADE™ TONER IS A CONCENTRATE CAN NOT BE PRINTED WITHOUT CLEAR BASE RESIN