

GINGIVA™ Gum-Like Dental Resin



Gingiva™ Pink - Colours may vary from screen image



TECHNICAL DATASHEET

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Company Information

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Product Description

Monocure 3D's Flexible Dental Resin, GINGIVA™ helps improve implant workflows and produces natural-looking, flexible gum-like parts for dental implant models. The elastic material is tear-resistant, flexible, and easy to adjust via grinding if needed.

SKU(s): DGR-3987PK, DGS-3988PK

Material: Soft/Flexible Urethane Based Photopolymer

Available Colour(s): Light Pink

Suitable Models: Gingiva | Soft Tissue | Gum-Like | Planning Appliances

NB: This resin is not approved for intra-oral applications.



</product-category/resins/dental-resins/gingiva/>



www.monocure3d.com.au

GINGIVA™

Gum-Like Dental Resin



Our GINGIVA™ flexible resin was developed specifically for printing Gingiva sections for 3D printed dental models. The material is available in two formulas for MSLA and DLP 3D printers. It can print within a wide range of UV, between 255 and 425nm.

PRINTING TIPS

- ✓ Ensure the resin is mixed well by shaking the bottle before every print.
- ✓ For optimal results, ensure 3D models are designed solid, with heavy and dense supports if required, and consider printing directly on the build plate due to its softness.
- ✓ Always dial-in new resins using our calibration models.
- ✓ For best results, and a safer alternative, clean models with our ResinAway® solution.

RESIN COMPATIBILITY: DLP & MSLA 3D Printers Guide

GINGIVA™ Dental Model Resin is available in two formulas. Since DLP printers output more power than MSLA, we have a version to cover both system types.

Choose the DLP formula if your printer uses a projector module (DLP) to expose the layers. These include brands and models such as the MoonRay, SprintRay, Peopoly Moai, Asiga UV-Max & Pro 4K, Phrozen Make, B9 Creator, Flashforge Hunter, XYZ Nobel, and Kudo Titan.

If your 3D printer uses an LCD screen and a LED array (MSLA) to expose the layers, you must use our regular MSLA formula. These include Anycubic, Phrozen, Creality, Elegoo, Epax, Peopoly, Prusa, Uniz, Wanhao, WOW SparkMaker & Kelant.

Easy-to-Print Formula



This Flexible resin was developed to 3D print with ease. It can be used in conjunction with our STUDY™ or PRECISE™ model resins.

Excellent Tear Resistance



A Semi-Flexible material with the right amount of hardness allows easy trimming without tearing. Has excellent mechanical properties after hardening.

Comparable to Conventional



It features Shore A hardness of 62 and is comparable to conventional materials, so technicians can adopt digital processes.

Multi-compatible formulas



It will work with all 3D resin printers. Choose the formula that is best suited to work with your DLP/MSLA 3D printer.

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MECHANICAL PROPERTIES

Method Code: ASTM D638-14

Product: Monocure GINGIVA™ Resin (50µm)

Acceptance Code: Supply Findings

Specimen Type: Rectangular beam samples (Type IV)

Equip' Serial No: UTM Serial No. 075

Conditioning: Tested at ambient temperature



SKUs	DGR-3987PK, DGS-3988PK
Cross-Sectional Area (mm ²)	25.29
Max Force (kN)	0.32
Tensile Strength (MPa)	2.7
Elongation at Break	36%
Young's Modulus (GPa)	11.9

Flexural Band Span (mm)	32
Max Load Applied (N)	26
Flexural Stress (MPa)	7
Max Flex Strain (mm/mm)	0.5
Shore Hardness (A)	65
Heat Deflection Temp	45°C @ 0.45MPa

GINGIVA™ flexible resin can be printed at a range of layer heights, and for optimal results, ensure 3D models are designed solid, with heavy and dense supports if required, and consider printing directly on the build plate due to its softness.

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Tensile	Low	2.7	high
Young's Modulus	Pliable	11.9	Stiff
Elongation	Low	36%	High
Flexural Stress(MPa)	Low	1.6	High
Shore A Harness	Soft	65	Hard



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MSLA LIQUID PROPERTIES

SKUs	DGR-3987PK
Colour(s)	Pink
Viscosity	400cps @ 25°C (BrookfieldRVT)
Odour	Negligible Characteristics
Shelf Life	36 months
Active Solids	100%
UV Cure	225nm to 420nm
Cure Speed	1.5-7 seconds per layer with UV 405um LED


TECHNICAL

Storage	Dark, cool & dry place
Wash Up	RESINAWAY® or IPA (Isopropyl Alcohol)
Compatible MSLA Printers	 [monocure3d.com.au/printers]
	Anycubic Phrozen Creality Elegoo Epax Peopoly Prusa Uniz Wanhao WOW SparkMaker Kelant Not Listed – Contact Us

DLP LIQUID PROPERTIES

Product Code(s)	DGS-3988PK
Colour(s)	Pink
Viscosity	400cps @ 25°C (BrookfieldRVT)
Odour	Negligible Characteristics
Shelf Life	36 months
Active Solids	100%
UV Cure	225nm to 420nm
Cure Speed	3-7 seconds per layer with UV 405um

DATASHEET

Storage	Dark, cool & dry place.
Wash Up	RESINAWAY® or IPA
Compatible Printers	 [printers/asiga-max-uv-dental]
	Asiga (Scan QR Code for .ini configuration files) SprintRay Peopoly MoonRay Phrozen Make B9 Creator Flashforge Hunter XYZ Nobel Kudo Titan Not Listed – Contact Us



FIND YOUR PRINTER SETTINGS

Access the slicer settings for dialing in with our all-resin systems by selecting your 3D printer(s) from the list available on our website, where you can also find information on printer specifications, reviews, and videos; if your printer is not listed, please do not hesitate to contact us.



PRINTER NOT LISTED?

Feeling frustrated with calibration? Download our Calibration Model to fine-tune your printer and get the best results. Need further assistance? Our local resin 3D printing experts are just an email away at support@monocure3d.com.au if you need one-on-one support.



DISCLAIMER

Please note that while our settings serve as a useful guide, not all 3D printers are created equal. Due to variations in make and model, your 3D printer may require different layer durations to achieve the desired results. Call us on +612 (0) 9738 5340





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WORKFLOW PROCEDURES

Most 3D Printers & Resin materials are unique and require setting up before first-time use.

We recommend that you dial-in new printers and resins using one of our handy calibration models that can be found at <https://monocure3d.com.au/product-category/3d-models/calibration-models/>

PRINTER SETTINGS

The following example settings have been formulated with consideration for monochrome MSLA 3D printers employing a 405nm light source. For more information pertaining to all our materials and most popular 3D printer models, please refer to the official settings page at: <https://monocure3d.com.au/printers/>

Shake resin bottle well before each use

Temperature: 18°C to 35°C

Layer Thickness: 50µm

Base layer Duration: 15-30(sec)

No. Base Layers: 2-4

Normal Layer Exposure: 3(sec)

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CLEANING

For optimal post-printing results, use ResinAway® to remove uncured resin. With enhanced cleaning, non-flammable properties, and a pleasant scent, follow the guidelines for the best finish on 3D dental models.

STEP 1. Ultrasonic cleaner with ResinAway®: 3-5mins

STEP 2. Dry models: Compressed air 20secs*

*Warning: Excess IPA or ResinAway® on models might result in cracking.



POST-CURING

GINGIVA™ resin requires post-curing to reach its optimal mechanical properties.

STEP 3. UV Light Source: 405nm LED Ultraviolet light.

STEP 4. Minimum Post-Curing Duration (m): 5mins

STEP 5. Remove the excess ResinAway® by washing with fresh water.

STEP 6. Place the model in the curing chamber for a minimum of 30 minutes to enhance the materials strength.

STORAGE

To ensure optimal performance and shelf life of Monocure 3D resins, store them in a cool, dark environment, tightly sealed in their original containers, away from heat, direct sunlight, and moisture, while also taking care to prevent the resins from freezing.



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