



prizma<sup>3D</sup>  
**BIO  
GUIDE**  
RESIN

prizma<sup>3D</sup>  
LIGHT-CURED RESIN  
FOR 3D PRINTING

**AUTOCLAVABLE**



**BIO  
COMPATIBLE**

**BIO GUIDE**

INDICATED FOR THE  
MANUFACTURE OF  
SURGICAL GUIDES FOR  
IMPLANTS AND OTHERS



PRINTERS  
**DLP/LCD**



**AMBAR**



Photos courtesy of  
the dental surgeon  
**Diógenes Holanda**

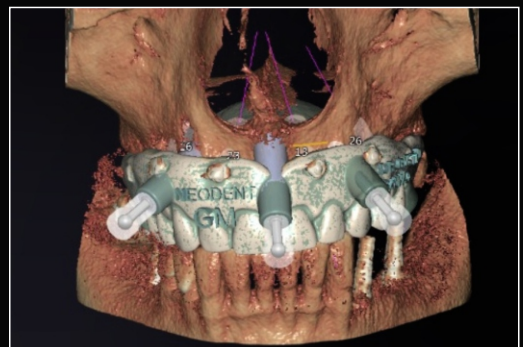
# priZma 3D **BIO GUIDE** RESIN

With technological advances, several treatments have emerged in dentistry and, certainly, one of the most important in implant dentistry is the use of surgical guides for implant surgery.

As a minimally invasive method, guided surgery makes the procedure simpler, more predictable and provides a more comfortable post-surgery for the patient. The increased use of dental implants in various dental treatments makes it essential to use this technique to reduce errors during surgery such as poorly angulated implants, bone fenestrations due to malpositioning, implant losses, poorly located prosthetic screws and, mainly, it contributes to the achievement of better aesthetic results.

Nowadays, with accessibility to high-tech equipment in dentistry, it is very easy to digitally plan implant placement with surgical guides.

Using a computerized tomography scan, an intraoral scan, and a dental implant CAD software, you can quickly plan a guided surgery and print the surgical guide using priZma 3D Bio Guide.



**Makertech Labs priZma 3D Bio Guide Resin** is suitable for 3D printing of surgical guides on DLP and LCD printers. This resin provides excellent definition, resolution, low shrinkage and repeatability, which facilitates the insertion of washers directly after printing.

After printing, and after autoclaved it reaches the translucent amber color, which facilitates the distinction of objects already sterilized.

## WHAT ARE THE ADVANTAGES OF GUIDED SURGERY?

Better postoperative, patient has less pain, edema and inflammation;

Less invasive procedure than conventional technique;

High predictability with the reduction of implant positioning errors;

Shorter surgery time and less bleeding;

Patient returns to normal life in a shorter period of time;

Low cost and fast return on investment.





# Characteristics of priZma 3D Bio Guide resin:

Printing of approximately 50 guides per 500g bottle

Excellent level of detail and definition in the print

Use in DLP and LCD printers

Transparent Amber color, odorless and tasteless

50 or 100 micron resolution

Viscosity 1400-1500 cps

Shore D hardness: 80-85

Density: 1.12 g/cm<sup>3</sup>

Flexural strength: 92.81 Mpa

Flexural modulus: 3060 Mpa

Tensile Strength at Break: 56.98 Mpa

Maximum Load: (N) 968,46

Autoclavable



For printing, consult the parameters of your printer in the Makertech Labs parameterizer by

[CLICKING HERE](#)

If you need help printing your guide such as: positioning, support placement and other activities, please contact our technical support by

**WhatsApp: +55 15 99116-0827**

# POST-PRINTING PROCEDURE

## 1. WASHING

- Always wear PPE when post-processing surgical guides.
- After completion of the impression, wash preferably still on the impression base with ethyl alcohol (>%90) or isopropyl alcohol (>%90%) for 5 minutes.
- Make sure that the alcohol completely covers the part during washing and never use alcohol already used on other resins.
- Use a brush to remove unpolymerized resin if necessary.
- Do not over-wash to avoid deterioration of the part dimensions.

## 2. DRYING

- Use air compressor to dry the washed part or leave in a ventilated place until dry.
- Make sure that the part is dry and that the excess unpolymerized resin is completely removed.

## 3. REMOVING PARTS FROM THE PRINTER BASE

- Remove the prints from the 3D printer base using a spatula indicated by the printer manufacturer.
- Be very careful not to damage your guide or hurt your hands.

## 4. POST-CURE

- To achieve the maximum strength of 92.8 MPa, the ideal post-curing should be carried out for a minimum of 40 minutes (40-60 minutes) in a UV chamber of wavelength 385 to 405 nm.
- After performing the post-curing, the supports should be removed from the models carefully and then perform the necessary finishing.

## 5. FINISHING AND STERILIZATION

- The surgical guides can be finished with polishing cutters to obtain shine and greater transparency. However, the finishing should be done only on the external side of the guide, so as not to impair its adaptation.
- Sterilization should be done only once in an autoclave, preferably in cycles for plastic material and, in the absence of this option, normal cycles. Chemical sterilization agents permitted by the regulatory body may also be used.

# COMPOSITE RESIN IN 3D PRINTING

## priZma 3D BIO GUIDE

### SHELF LIFE

2 years from date of manufacture  
or 3 months after opening.

### DISPOSAL METHOD

Do not reuse the product and dispose  
of it in accordance with local legislation.

### ANVISA: 80483740003

Other information such as precautions,  
adverse effects, first aid,  
transportation conditions and others  
can be found in the IFUs on  
our Website or on the ANVISA website.  
Questions and support via WhatsApp:

**+55 15 99116-0827**

**Or visit our website**

**[www.makertechlabs.com.br](http://www.makertechlabs.com.br)**



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