

**Product:** Graphene nanoreinforced biopolymer disc for CAD/CAM drilling. Dental use.

**Material:** Base of PMMA (polymethyl methacrylate) doped with graphene.

Please read this instruction sheet carefully before using the product.

## Description

G-CAM is a thermostable acrylic with a principal base of polymethyl methacrylate resin doped with graphene (allotropic form of carbon), suitable for the creation of dental prostheses using CAD/CAM technology.

G-CAM has been designed to provide an integral solution for dental prostheses using the CAD/CAM technique.

## Recommendation for use

### 1. Handling

The G-CAM disc is used dry, so it will be necessary to suction any debris resulting from the drilling operation. The drills may break if improper tools are used. Although graphene helps to dissipate the heating of materials, an inappropriate strategy may cause the overheating and deformation of the material.

### 2. Processing and application

The minimum thickness of the walls of the reconstructions should be 0.6 mm in occlusal and 0.4 mm in cervical areas. The cross-sections of connectors in the anterior area should not be less than 9 mm<sup>2</sup> or less than 13 mm<sup>2</sup> in posterior areas. There should be no more than three elements between the two pillar pieces.

G-CAM can only be used in drilling systems without RFID connection (radio frequency identification), as our product is designed for completely open systems.

The PMMA drilling strategy is used.

### 3. Professional use

G-CAM must be used only by dentists, dental technicians and qualified personnel with specific training. Only original tools and parts may be used for processing.

### 4. Storage

The product should be stored at room temperature in its original packaging. Protect from sunlight.

### 5. Risk and safety indications

The information and advice contained in this instruction sheet should be adhered to in order to safeguard the quality and safety of the material.

- The occupational safety measures indicated in the regulations which are currently in force will be applicable.
- A protective mask and suction equipment must be used to prevent the inhalation of dust.
- Safety goggles should be worn to avoid damage to the eyes caused by foreign particles.

### 6. Contraindications

Although the elimination of residual monomers which can cause allergies is tested during the manufacturing method, there are no recognised contraindications, except in the cases of adverse reactions to polymethyl methacrylate.













### 7. Quality management

The manufacture and control of these G-CAM discs is done according with UNE-EN ISO 13485: Medical devices. Quality management systems. And Graphenano Dental carries out a continuous evaluation of manufacturing process and final products, in order to minimize the risks related to the manufacture and installation of prostheses get from our discs in the patient.

### 8. Technical characteristics

- Elastic modulus: >3200 MPa
- Bending strength: >140 MPa
- Surface hardness: 88 Shore
- Water absorption: 4 µg/mm<sup>3</sup>
- Residual monomer: <0,004 %

### 9. Applied symbols

 LOT	Lot number		Format
 REF	Reference number		Store in a dry area
	Colour		Diameter
	Protect from sunlight		Thickness
	Check the instructions of use		Do not reuse
	Manufacturer		
	Take into account the documentation that accompanies the product		

### 10. Other observations

This instruction sheet corresponds to the current technique and our own experience.

- The product may only be applied for the indications described in its description.
- The user is solely responsible for the application of the product.
- As manufacturers, we do not assume any responsibility for failed results, given that we do not participate in the process.
- Any claims for damages are limited exclusively to the commercial value of our products.

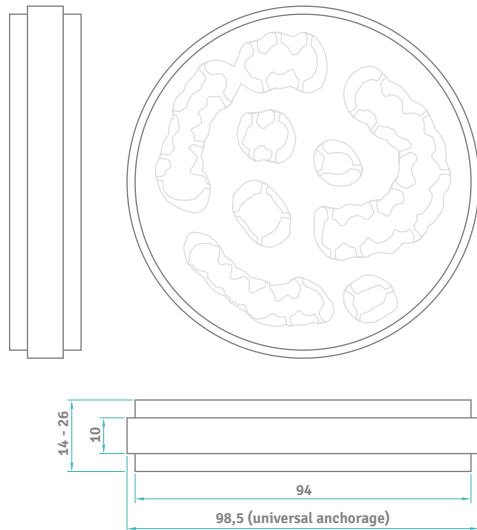
## Range of products

G-CAM disc is available in 2 different formats:

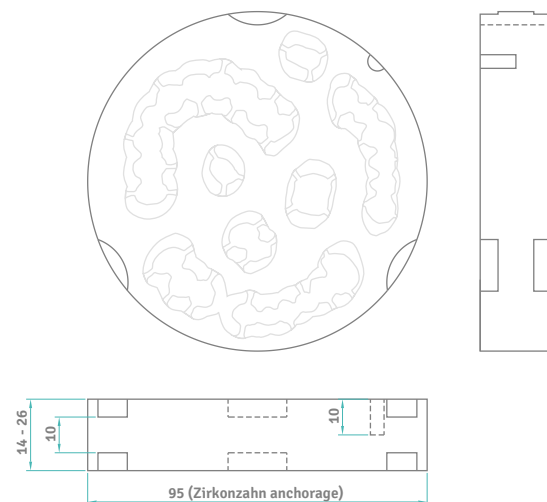
- **G-CAM MONOCHROMA.** Monochrome colour disc format for anchored or aesthetic coated meso-structures.
- **G-CAM MULTICHROMA.** Multichromatic disc format for performing full anatomical monolithic restorations.

The disc dimensions are as follows: 98.5 mm (universal anchorage) or 95 mm (Zirkonzhan anchorage) in diameter: 14, 16, 18, 20, 22, 24, 26, 28 and 30 mm.

### G-CAM disc - Universal anchorage



### G-CAM disc - Zirkonzahn anchorage



### Contact

In case of clarification or incident with these discs,  
please contact **Graphenano Dental, S.L.**

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