



Graphenano  
DENTAL



# G-CAM

**Graphene reinforced**  
biopolymer disc for CAD/CAM milling  
**For definitive prostheses**

Graphenano Group:



**FDA**  
cleared



**Made in**  
**Spain**

## Nanotechnology

**Graphenano Dental** is focusing on nanotechnology for the dental sector by creating graphene-reinforced **biopolymers for the manufacture of dental prostheses using CAD/CAM milling technology**.

The **G-CAM disc based on polymethylmethacrylate doped with graphene** is indicated for permanent dental structures, Class IIa. It is also available in different chromatic ranges that provide a natural esthetic.

Due to the incorporation of graphene into our polymers, we have been able to exponentially improve mechanical, physicochemical and biological properties.

## G-CAM properties

- Suitable for definitive prosthesis.
- Mechanical properties similar to those of natural tooth.
- Excellent aesthetic properties.
- High elastic modulus and resistance to deformation.
- Colour stability.

## Material properties

Elastic modulus <sup>(1)</sup>:  
**3200 ± 7% MPa**

Bending strength <sup>(1)</sup>:  
**140 ± 7% MPa**

Water absorption <sup>(1)</sup>:  
**4 µg/mm<sup>3</sup>**

Solubility <sup>(1)</sup>:  
**0,5 µg/mm<sup>3</sup>**

Compressive strength <sup>(1)</sup>:  
**155 ± 5 MPa**

Residual monomer <sup>(1)</sup>:  
**<0,004 %**

Surface hardness:  
**88 ShoreD <sup>(2)</sup>**  
**19.5 KHN <sup>(3)</sup>**

<sup>(1)</sup> ISO 20795-1: 2013 | <sup>(2)</sup> ISO 48-4:2018 | <sup>(3)</sup> ASTM E384 <sup>(4)</sup> ISO 5833:2002

## Economic advantages



- Higher number of pieces can be milled of pieces per disc.
- Faster and more efficient work processes, thanks to the CAD-CAM SYSTEM.
- Reduction of working times.
- G-CAM does not require thermal processes.
- Application of different characterization techniques.
- Increased profitability.

## Material comparison

	G-CAM	Zirconium
Pieces per disc	28/32	20/22
Working time per arch	3,5 hours	11 hours

## After-sales service

Graphenano Dental has a technical support department which is in charge of providing complete customer service:



- Trainings
- Treatment advice
- Design review
- Consultation management