



Graphenano
DENTAL



G-CAM

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

Graphenano Group:



The registration of Graphenano dental and G-CAM in USA may be check under the FDA's Establishment Registration & Device Listing page.

<https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfRL/rl.cfm>

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 ⁽¹⁾:
3200 ± 7% MPa

Bending strength ⁽¹⁾:
140 ± 7% MPa

Water absorption ⁽¹⁾:
4 µg/mm³

Solubility ⁽¹⁾:
0,5 µg/mm³

Compressive strength ⁽¹⁾:
155 ± 5 MPa

Residual monomer ⁽¹⁾:
<0,004 %

Surface hardness:
88 ShoreD ⁽²⁾
19.5 KHN ⁽³⁾

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

Economic advantages



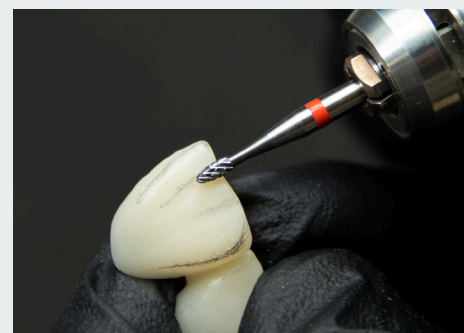
- Higher number of pieces can be milled of pieces per disc.
- Faster and more efficient work processes, thanks to the CAD-CAM SYSTEM.
- Reduction of working times.
- G-CAM does not require thermal processes.
- Application of different characterization techniques.
- Increased profitability.

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