#### **Technical data sheet**

# Zirconium-reinforced composite peracam®



#### **Manufacturer**

Dentale Kompetenz Birgit Stührenberg GmbH & Co.KG Eiderstede 2a

Eiderstede 2a 24582 Bordesholm Germany

Dentale Kompetenz is certified according to

■ DIN EN ISO 13485 RL 93/42/ECC (CE 0482)

# Description

Zirconium-reinforced composite peracam®

#### Description

peracam® is a milling blank for CAD/CAM technology made of PMMA, reinforced with zirconium dioxide. This composite is a high-quality alternative to all-ceramic applications. It is particularly suitable for long-term temporary appliances.

#### The most important advantages of peracam® are:

- high abrasion resistance
- high resistance to plaque
- excellent bio-compatibility

## Indications for permanent dentures

- crown and bridge technology for max. three bridge units (fully anatomical and reduced)
- veneers and partial crown technique
- Telescopic and tertiary substructure technology
- Implant superstructures
- Table tops (ideal for patients with bruxism)

# ■ Indications for long-term temporary appliances

- Crown and bridge technology with up to 16 pontics (fully anatomical and reduced)
- Veneers and Partial Crowns

Telescopic and Tertiary

Substructures

- Implant superstructures
- Tabel tops (ideal for patients with bruxism)

#### Contraindications

If allergies to the constituents are known, or if allergic reactions are possible, a restoration with peracam® must not be used.



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#### Options

The peracam® milling blanks for CAD/CAM technology are available in Vita shades A1, A2, A3, A4 and B2.

#### Substructure design

For crowns and bridges, the following values must not be less than their values specified:

- Minimum wall thickness, cervical: 0.6 mm
- Minimum wall thickness, occlusal: 1.0 mm
- Minimum wall thickness at crown edge: 0.2 mm
- Connector cross sections in the anterior tooth area: > 10 mm²
- Connector cross sections in the posterior tooth area: > 15 mm²

# **■** Finishing and polishing

- Application of cross-cut carbide cutters
- During the finishing process, use a low speed of your equipment, minimum contact pressure and sufficient cooling
- The pre-polish is done with polishing brushes made by *ceramident*® and *ceramiPreStar* or commercially available tools
- High-gloss burnishing with polishing tool and ceramidentStar or commercially available products
- To avoid plaque accumulation, careful polishing is required

## Veneering

peracam® can be veneered with ceramident® and all veneer composites after appropriate surface conditioning.

- Abrasive tool use only fine-tooth carbide cutters
- Ensure that the surface is clean, dry and grease-free, before continuing to process the material.
- Application of *ceramiBonding* or commercially available products ■

Veneering with ceramident® or commercially available veneer composites

Important: When preparing a vestibular veneer, it is necessary to apply a protection on the masticatory edge.



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#### Attachment

All current temporary and permanent fastening cements are suitable.

#### **■** Composition

РММА	Inorganic fillers	Inorganic pigments
> 78 (in %)	<b>20</b> (in %)	<b>&lt; 2</b> (in %)

# Physical properties (guidelines)

Elasticity modulus	3,050	[MPa] or [N/mm <sup>2</sup> ]
Flexural strength β <sub>B</sub>	72	[MPa] or [N/mm <sup>2</sup> ]
Vickers hardness	196	[MPa] or [N/mm <sup>2</sup> ]
Residual monomer	< 1.0	[%]
Water solubility <b>L</b>	1.6	[µg/mm³]

