

# CERAMAGE® & GUM COLORS

## THE AESTHETICS OF PORCELAIN WITH THE BENEFITS OF INNOVATIVE COMPOSITE TECHNOLOGY



# OUTSTANDING FEATURES THANKS TO HOMOGENEOUS MICROSTRUCTURES

Light-curing tooth restoring materials such as micro-filled veneering materials have outstandingly proven their clinical value and have become a standard thanks to their excellent properties and simple handling.

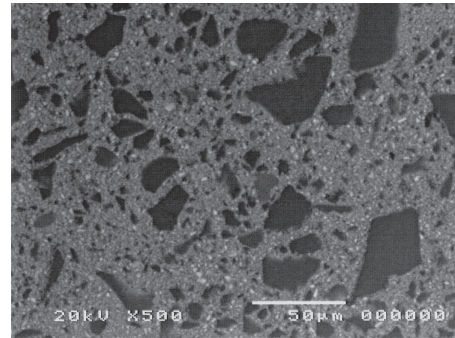
CERAMAGE is not comparable with conventional composite materials, as it is filled with more than 73% of micro-fine ceramic particles and combines the benefits of both ceramic and composite in one material.

This composition, supported by an organic polymer matrix, reinforces the homogeneous structure and gives CERAMAGE properties similar to ceramic, which are used in both metal-reinforced and also metal-free anterior and posterior restorations.

In addition to the physical properties, a light refraction index very close to that of natural dentine and enamel has been integrated into CERAMAGE.

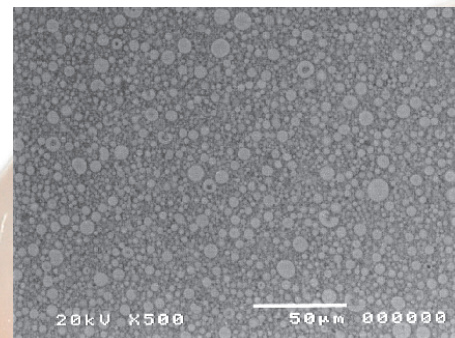
- Excellent flexural and compressive strength
- Excellent abrasion resistance of occlusal faced restorations
- Highest aesthetics thanks to light transmission similar to natural teeth
- Extensive range of translucent effect colours

## Conventional composite



Conventional composites show irregular proportions between glass-fillers and matrix

## CERAMAGE



The homogeneous micro-structure gives CERAMAGE excellent physical properties

- High colour stability
- Perfect viscosity and modelling properties
- Superb polishability
- Outstanding plaque resistance
- Excellent biocompatibility

# UNRESTRICTED INDICATIONS FOR ANTERIOR AND POSTERIOR RESTORATIONS

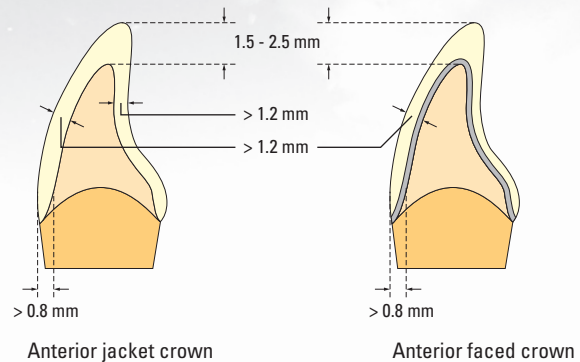
## Adequate material for any indication

CERAMAGE combines a natural colour reproduction with an extraordinary strength and elasticity and is recommended for standard cases as well as highly stressed and implant restorations.

- Fully veneered crowns and bridges
- Fully veneered telescopic and implant-supported work
- Precision attachment work
- Occlusal faced restorations
- Inlays / Onlays
- Veneers
- Long-term temporary restorations
- Modifying conventional acrylic teeth

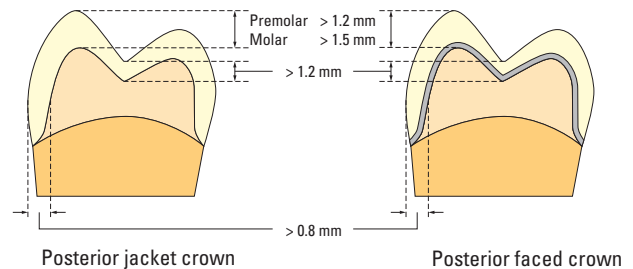
## Anterior restorations

For metal-free as well as metal-reinforced anterior restorations preparation recommendations are:  
 a) labial margins rounded shoulders,  
 b) lingual area deep chamfers.  
 The total thickness should not be less than 1.2 mm.



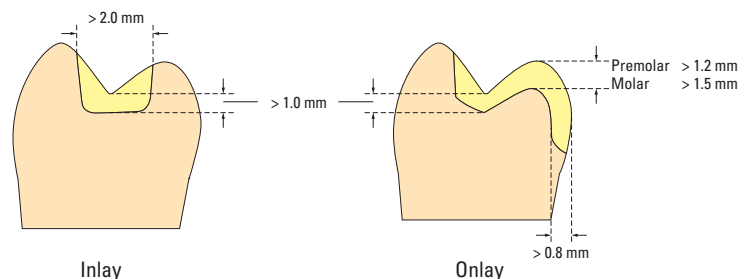
## Posterior restorations

Especially for posterior restorations a clearly defined rounded shoulder is an important condition for the compensation of the expected mastication forces. The metal thickness should not be less than 0.3 mm.



## Inlays / Onlays

For the cavity of metal-free inlays or onlays, a sharp-edge preparation should be chosen with borders outside the antagonistic contacts.



# MATERIAL CHARACTERISTICS

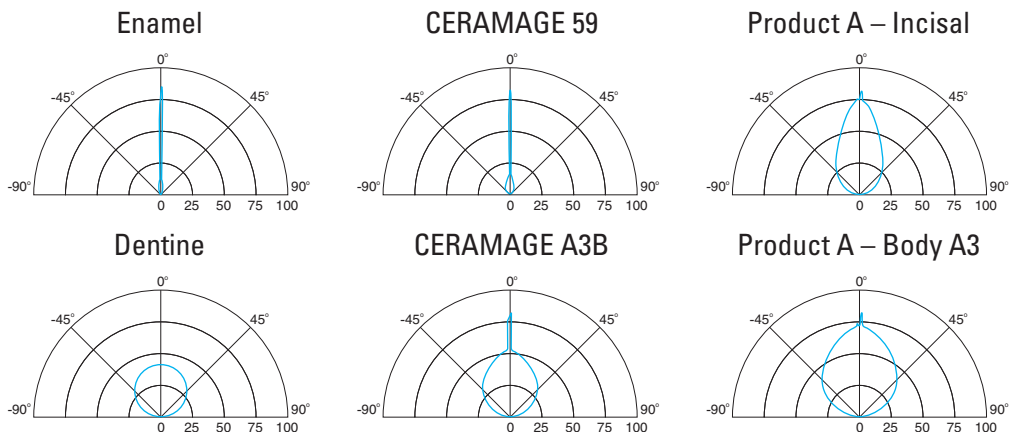
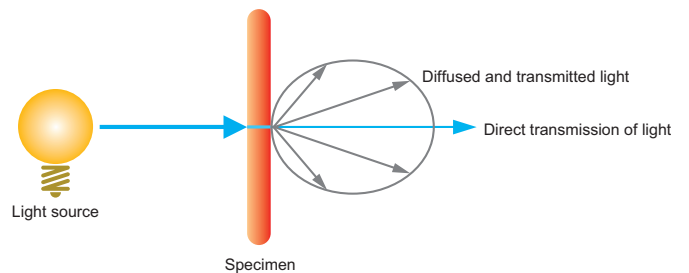
## Natural light transmission

The natural appearance and light transmission of dentine and enamel are highly different. In order to reproduce these properties as naturally and easily as possible, it was necessary to create a new filler in terms of size and structure as well as optical properties when developing CERAMAGE.

The light transmission and diffusion of CERAMAGE incisal and body compounds are therefore very similar to natural teeth.

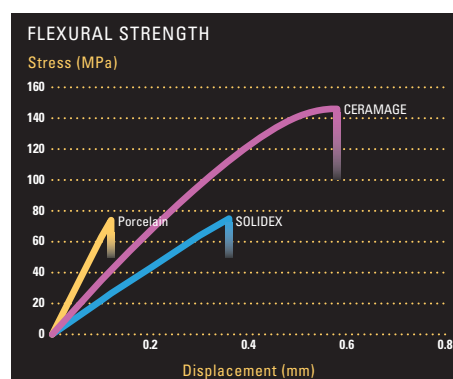
Even a basic layering of opaque dentine, body and incisal pastes enables the technician to reach natural aesthetics that have been unattainable for composite restorations until now.

## Principle of measuring transmission and diffusion of light



## High abrasion and flexural strength

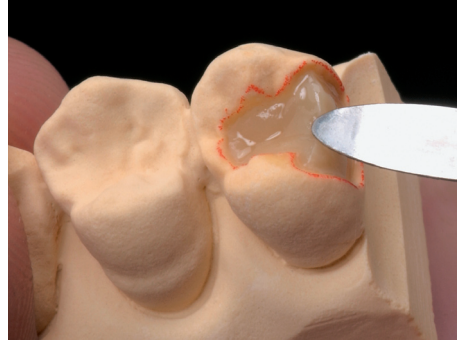
CERAMAGE provides an extraordinary combination of elasticity and resistance to abrasion. It is harder than other light-curing composites and extremely resistant to breakage, but considerably more elastic than ceramics. CERAMAGE is therefore an outstanding solution for lasting posterior restorations.



# EXCELLENT HANDLING PROPERTIES AND AESTHETICS

## Inlays / Onlays

The structure and extraordinary composition of CERAMAGE allow a controlled application and shaping, even on small anatomical details. Thus, the buildup of metal-free inlays and onlays is simple and fast.



Before



After

## Telescope and implant works

Thanks to the natural colour setting of the CERAMAGE dentine and opalescent incisal shades, removable and fixed restorations showing an extremely harmonious appearance can be produced with a basic layering only.

There is no limit to creativity and experience thanks to the versatile translucent and effect shades available in various pasty consistencies.

In prosthetic work, the combination of CERAMAGE and CERAMAGE Flow turn out to be closer to the natural original than ever before.



Telescope work



Implant work

# NATURAL APPEARANCE OF ...

The natural appearance of combined telescopic and implant-supported restorations is distinctively influenced by the harmonious design and colouration of the red and white aesthetics.

The supplementary CERAMAGE GUM materials have the same basis as the tooth-coloured components of the established micro-ceramic hybrid composite system.

They are adapted from the natural gingiva colours and effects and offer unlimited possibilities for the restoration of reduced or missing parts of the gingiva.













## Indications

- Removable telescopic / implant works
- Metal-reinforced and metal-free CAD / CAM constructions
- Definitive composite restorations
- Long-term temporary restorations
- Removable partial dentures

## More space for creativity

Seven shades are available for the natural creation of red aesthetics. Based on the Paste Opaques applied pure or mixed, there are no limits to your creativity with these materials. From bluish-violet to light pink, you can achieve a perfect design of the red and white aesthetics.

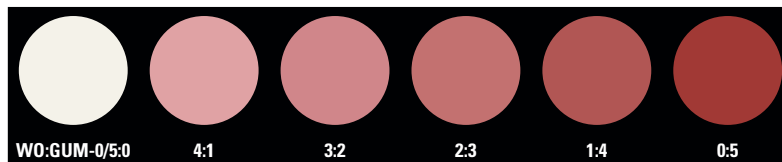
OPAQUE	 GUM-O	 WO		
TRANSLUCENT	 GUM-T			
CONCENTRATE	 GUM-L	 GUM-D	 GUM-Or	
FLOWABLE CR	 F-GUM-Br	 F-GUM-V	 F-GUM-R	 F-W

# ... THE RED-WHITE AESTHETICS

## The proper colour basis right from the start

In addition to the colours which are available in two different viscosities, the CERAMAGE GUM COLOR system contains two ready-to-use Paste Opaques.

By selectively mixing the white and pink Paste Opaques, you can reproduce a wide variety of intermediate shades as a colour basis for covering the framework and subsequent layers.



## Individual accents with GUM Flow

The creation of fine, individual colour nuances and accents can be achieved easily with GUM Flow. The pastes have a higher flowability than the conventional CERAMAGE composites and can be mixed, just like the Paste Opaques. GUM Flow can be used to create excellent interdental or convex alveolar areas.



## Natural aesthetic appearance without compromise





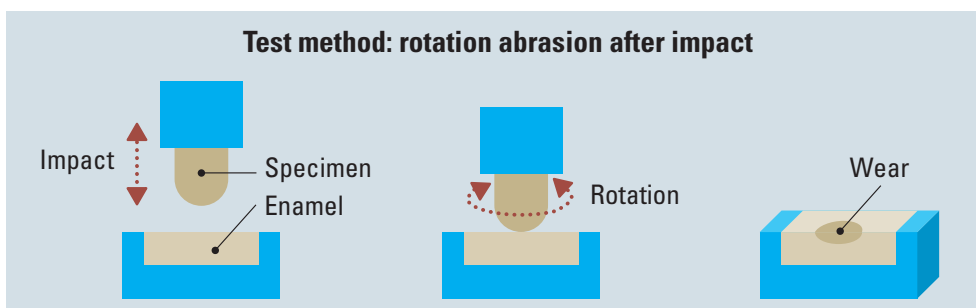
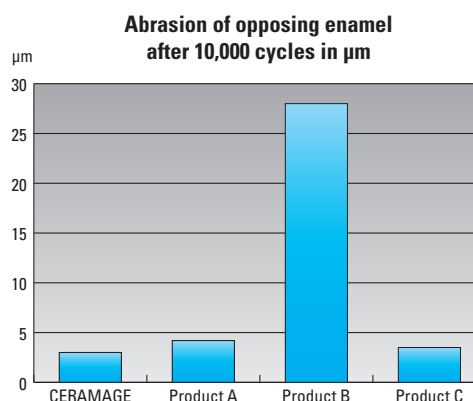


# TECHNICAL DATA

The outstanding physical characteristics of CERAMAGE are achieved solely through light-curing. There is no need for complex and time-consuming conditioning or thermal treatments. Especially with implant restorations, this is a great advantage because the differently processed materials are not exposed to further thermal stresses during the curing process.

## Abrasion-resistant and gentle on the teeth

The material structure and the homogeneous surface resulting from this are extremely antagonist-friendly and secure better resistance against loss of shine, discolouration and plaque. These abrasion properties are convincing thanks to a noticeably high comfort in wearing the prosthetic work.



## Physical data

	CERAMAGE Crown and Bridge composite	CERAMAGE Flowable Composite Resin	SOLIDEX Crown and Bridge composite	Test method
Vickers Hardness (MPa)	726	392	422	Based on a SHOFU test
Flexural Strength (MPa)	146	132	75	
Flexural Modulus (GPa)	10.7	6.0	5.7	
Compressive Strength (MPa)	354	303	314	
Indirect Tensile Strength (MPa)	62	58	48	
Polymerisation Shrinkage (vol.-%)	2.5	3.3	2.5	
Enamel Abrasion of the Antagonist ( $\mu\text{m}$ )	3.2	2.5	4.8	
Working Time (min.)	>30	25	>30	

# THE EASY WAY TO HIGH-SHINE, ROBUST SURFACES

Due to the excellent polishability and the homogeneous surface of CERAMAGE, it has a high resistance to plaque. The extraordinary structure and the 73% of ceramic micro-fillers ensure a durable surface quality.

## CERAMAGE FINISHING & POLISHING KIT

Developed specifically for CERAMAGE, the instruments of this kit provide a systematic, time-saving polishing technique for producing an optimal surface quality. It is possible to access hard-to-reach occlusal and interproximal areas of any restoration with the diamond-impregnated, long lasting CompoMaster Coarse and CompoMaster polishers.

**PN 0333**



## DURA-POLISH

The alumina polishing paste DURA-POLISH creates a surface that is smooth and even on all CERAMAGE restorations. The homogeneous surface can be easily polished to a high lustre in the next step.

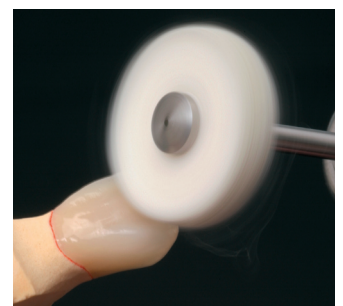
**PN 0552**



## DURA-POLISH DIA

This polishing paste is filled with diamond particles to an extremely high level. It was particularly developed to match the particle structure and distribution of the inorganic fillers of the CERAMAGE composite. After the use of DURA-POLISH paste, all anatomical surface details can quickly and easily be polished to a high lustre with DURA-POLISH DIA and a felt wheel.

**PN 0554**



*We would like to thank Mrs. PSK® Carla Gruber, Unterschleißheim/Germany, MDT German Bär, St. Augustin/Germany, and Mr. Akinobu Ogata, Tokushinkai Group, World Lab USA, for their friendly support and for providing their images.*

# SET COMPONENTS

## CERAMAGE AB SET

The comprehensive CERAMAGE AB Set is the basis of this composite system and enables natural reproduction of the A and B shades of the VITA\* Classical Color System with logically coordinated single components.

**PN 1801**



## CERAMAGE CD SET

This set is based on the contents of the CERAMAGE AB Set. The additional C and D shades of the VITA\* Classical Color System can be simply and efficiently reproduced with this supplementary set.

**PN 1802**



## CERAMAGE 8 COLOR SET

This set contains all the components for the production of aesthetic restorations in the shades A1 to A4, B2 and B3 as well as C3 in a practical rack.

**PN 1806**



## CERAMAGE INTRO SETS

The efficient start to the CERAMAGE technique.

Shade: A2

**PN 1807**

Shade: A3

**PN 1808**



## CERAMAGE GUM COLOR FULL SET

The individual components of this set are applicable in a versatile way and offer unrestricted possibilities for the reproduction of gingival structures when producing high-quality telescopic and implant supported restorations.

**PN 1804**



\* VITA is a registered trademark of VITA Zahnfabrik, Bad Säckingen, Germany



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