PREVENTION | RESTORATION | IMPRESSION

DIGITAL RESTORATION

MIMICKING NATURE – VISALYS® BIOCERAMIC BLOCK

BIOCERAMIC CAD/CAM BLOCKS

Perfect imitation is no coincidence.
Restorations inspired by nature.

- BIO SUSTAINABLE
- BIO COMPATIBLE
- BIO ESTHETIC
- BIO MIMETIC

KETTENBACHDENTAL
Simply intelligent

PERFECT IMITATION IS NO COINCIDENCE

The **VISALYS® BIO**CERAMIC BLOCK was developed to mimic the natural biomechanics of teeth. It combines strength, elasticity and fracture resistance with optimal esthetic properties such as light refraction. A true material innovation that can be placed in just one visit.

For restorations that integrate perfectly.

INSPIRED BY NATURE – THE MATERIAL COMBINES:

Best properties of three established CAD/CAM materials.

1. Esthetic properties of glass ceramics through a single glass phase composition
2. Compressive strength of hybrid ceramics due to aluminum oxide
3. Flexibility, chipping resistance and easy processing due to resin content

In short: high-end technology in an unique material combination.

APPLICATION ADVANTAGES

Esthetic & functional

Natural translucency, opalescence, and flexible color adaptation. The ultra-fine glass microstructure ensures a lasting high gloss; the stability combined with dentin-like elasticity and hardness provides optimal handling, lasting marginal stability, and the prevention of decementation. For the creation of durable highly esthetic work.

Simple & efficient

The product guarantees shorter milling times and enables a straightforward cementation process with excellent sealing and no micro-leaks. And should a repair ever be necessary, the material can be easily repaired directly in the mouth with **VISALYS®** composite.

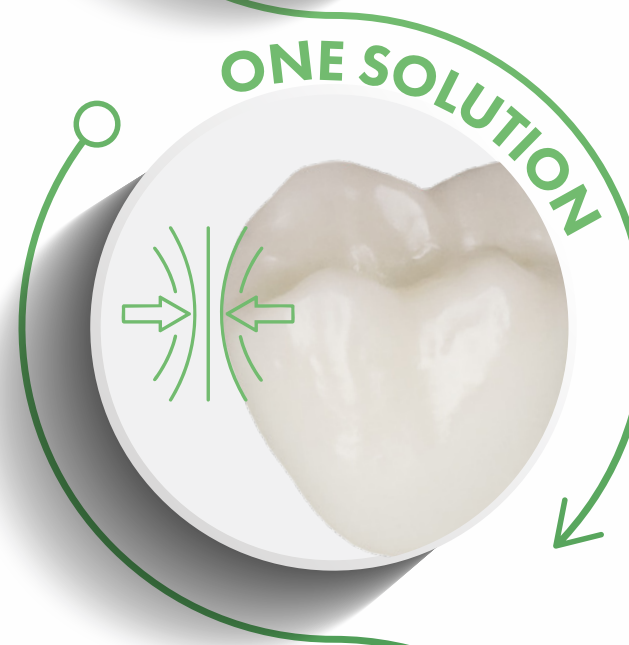
Time-saving & economical

With the **VISALYS® BIO**CERAMIC BLOCK no glaze firing is needed and the processing time (grinding/polishing) is significantly reduced. Suitable for value-adding chairside applications with simultaneous long tool life for the milling burrs used.

ONE VISIT – ONE SOLUTION – THREE SIMPLE STEPS

The unique material properties enable significantly shorter milling times, depending on the milling machine used, and in any case extend the service life of the milling cutters. Furthermore, you do not need to sinter or glaze the **VISALYS® BIO**CERAMIC BLOCK. The block is simply polished and then used.

The **VISALYS® BIO**CERAMIC BLOCK is produced using an advanced, patented vitrification/laser sintering technology. The material's unique structure offers an excellent combination of strength, flexibility, esthetics, and color stability.



Thanks to its positive properties, restorations with the **VISALYS® BIO**CERAMIC BLOCK can be completed in just three steps in the dental practice:

1. **Milling**
2. **Polishing**
3. **Cementing**

For cost-effective and efficient work.

ONLY THE BEST FOR YOUR PATIENTS – INSPIRED BY THE PERFECTION OF NATURE

1 BIO MIMETIC

For a natural mouthfeel and good chewing behavior, the **VISALYS®** **BIO**CERAMIC BLOCK imitates the natural properties of dentin and enamel.

2 BIO ESTHETIC

For an appearance that blends perfectly into the natural esthetics, the block offers tooth-like light refraction and natural translucency.

3 BIO SUSTAINABLE

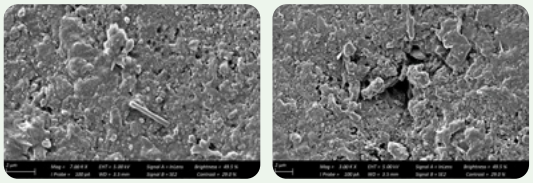
For minimally invasive preparations and gentle handling of natural tooth structure, the **VISALYS®** **BIO**CERAMIC BLOCK offers the best material properties.

4 BIO COMPATIBLE

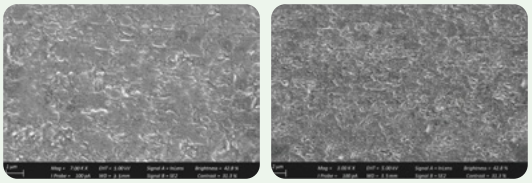
For high biocompatibility, the material is BPA-free. Zinc oxide and fluoride incorporated into the material also provide antibacterial properties and help prevent biofilm and plaque formation on the restoration.

THE BLOCK
THAT MAKES IT POSSIBLE

The **VISALYS® BIO**CERAMIC BLOCK is a unique, optimally pre-sintered hybrid glass block, characterized by unparalleled homogeneity, which makes its positive material properties possible in the first place. The material does not require further firing and glazing.

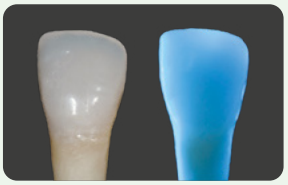


SEM images of the material structure of competitive products

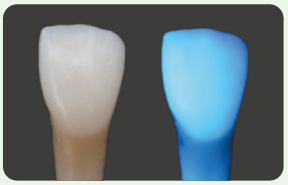


Homogeneous material structure of the **VISALYS® BIO**CERAMIC BLOCK

Due to its homogeneous material structure, the **VISALYS® BIO**CERAMIC BLOCK has an attractive translucency/opalescence and fluorescence with natural light reflections. A short polishing step is sufficient to achieve a high-gloss surface.



Translucency/opalescence and fluorescence of a natural tooth



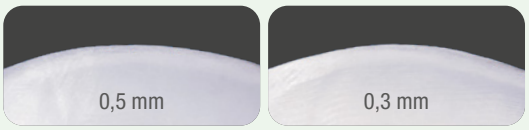
Remarkably natural translucency/opalescence and fluorescence of the **VISALYS® BIO**CERAMIC BLOCK 1)

The **VISALYS® BIO**CERAMIC BLOCK consists of a silica-based glass-ceramic phase integrated within a resin/ polymer matrix giving it a strength comparable to lithium disilicate, while retaining dentin-like elasticity. This supports tooth-like behaviour under chewing forces, with fracture resistance, edge stability and friendly wear characteristics.

Chemical substances	Result (in wt%)
Glass: Silica ceramic	72.97
Fluoride	0.83
Zinc oxide	1.40
Aluminium oxide	9.80
Polymer network	14.00
Additives, pigments, catalysts	1.00

2)

Edge stability of ceramic, at the respective edge thickness



Edge stability of BioCeramic, at the respective edge thickness

1) The image shows a VISALYS® BIOCERAMIC Chroma crown in shade A1.
2) Source: Selquet Testing And Research Laboratory Private Limited

PRODUCT RANGE

VISALYS® BIOCERAMIC BLOCK

All blocks are available in the standard size **12 x 14 x 18 mm**.
One pack contains **5 blocks**.

Indications

- Veneers
- Thin veneers
- Occlusal veneers
- Inlays, onlays
- Partial crowns
- Crowns (anterior/posterior)
- Implant-supported crowns

STARTER PACK

Color-assorted introductory set with one block each of the colors A0-A3 and one translucent block

Starter pack, Translucent, A0, A1, A2, A3, 5 pieces
REF 1507599

TRANSLUCENT BLOCK

Highly translucent hybrid glass blocks mimicking natural enamel. Individually shade adaptable.

Translucent, 5 pieces
REF 1507099

CHROMA BLOCK

High-chromatic hybrid glass block corresponding to Vita shades with biomimetic properties.

Chroma, 5 pieces

A0	REF 1507199	A2	REF 1507399
A1	REF 1507299	A3	REF 1507499

Indications

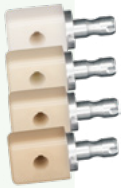
- Implant-supported crowns

IMPLANT BLOCK

For precise and reliable fabrication of implant-supported restorations. Compatible with Ti-base systems or similar attachments.

Implant Translucent, 5 pieces

ø L	REF 1508099
ø S	REF 1508699



Implant Chroma, 5 pieces, ø L

A0, ø L	REF 1508199
A1, ø L	REF 1508299
A2, ø L	REF 1508399
A3, ø L	REF 1508499

Implant Chroma, 5 pieces, ø S

A0, ø S	REF 1508799
A1, ø S	REF 1508899
A2, ø S	REF 1508999
A3, ø S	REF 1509099

FOR CEMENTATION

VISALYS® CEMCORE
Dual-cure luting composite and core build-up material

Available in the shades Universal (A2/A3), Opaque, Translucent, Bleach, Dark (A4), includes Tooth and Restorative Primer

FOR REPAIR

VISALYS® BULK FILL
VISALYS® BULK FLOW
Esthetic One Shade 4mm Composite

Available as a packable and flowable composite in syringes and capsules in the universal shade (A2/A3) with a chameleon effect.

www.kettenbach-dental.com/bioceramic

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