

# visio.lign

crea.lign veneering system

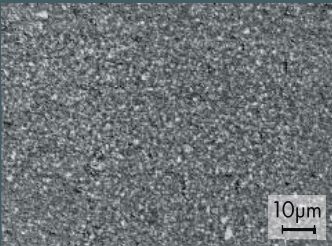


New Products

bredent

# crea.lign freestyle

crea.lign freestyle is the new veneering composite designed to do away with the constraints and limitations of composite veneers and to set new standards for permanent veneering of metal, ceramic and resin substructures. crea.lign is a light-curing composite which consists of 50 % of opalescent ceramic particles and a high-strength oligomer matrix. The crea.lign veneering material that contains only nanofillers does not contain any ground glass fillers. Agglomerates (lumping) in the material are avoided and a homogeneous and dense surface is achieved by the particle size of 40 nm.



SEM pictures - Sinfony 10µm

The omission of a hard composite which tends to embrittle results in excellent polishing properties and superior plaque and abrasion resistance. By introducing crea.lign, bredent deliberately uses the successful implementation of

## Opaquer crea.lign

Together with MKZ primer, the light-curing crea.lign opaque material provides the basis for perfect bonding of metal and ceramic substructure materials and hence for durable prosthetic restorations. Bonding tests show that there is no significant decrease in bond strength despite ageing (using thermocycling).

Required masking of the shade is achieved with crea.lign opaque paste already for layers with a thickness of 0.1 mm and adequate spreading behavior and stability are ensured.

### Combination table:

Opaquer crea.lign	1	2	3	4	5	6	7	8	Gum
A-D shades	A1 B2	A2	A3 D3	BL3/B1 C1	C2/C3 D2/D4	B3 B4	A3,5	A4 C4	Gum

The crea.lign freestyle veneering composite set for free-hand layering comprises the gel-like crea.lign materials, the new light-curing crea.lign Opaker, the new matched E1, E2, E3 and E4 incisal materials, crea.lign stains and modifier and the optional visio.paint set of stains. In a second stage, the crea.lign paste for free-hand layering will be added to the product range. The paste-like veneering composite will be available in 17 A-D shades and can be combined with all crea.lign materials.



SEM picture of crea.lign 2µm

plaque-resistant veneering materials from the visio.lign system and adds additional materials required for free-hand layering to the system.

The mat surface after polymerizing is an indicator for proper curing that can be achieved using modern light-curing devices for veneering techniques.

The newly developed shade system of the crea.lign opaque material provides optimized efficiency and individuality. All shades of the classic A-D system can be covered with only 8 opaque materials without any limitations on layer thickness or shade effect of the veneer.



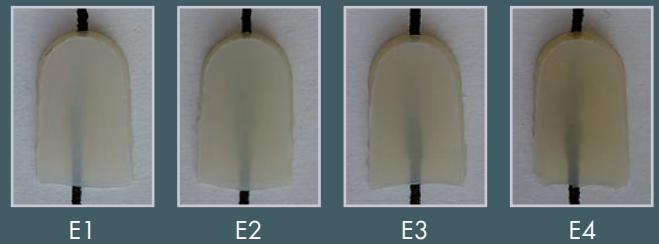
9-piece crea.lign Opaker set, including GUM Opaker.





## New incisal materials - E1, E2, E3 and E4

The incisal materials E1, E2, E3 and E4 are added to the crea.lign veneering composite for free-hand layering - crea.lign freestyle. The use of the new incisal materials in various shades enables perfect design of dentin-incisal transitions. Moreover, reliable shade reproduction is achieved using the two-layer technique and lifelike appearance of the veneer is ensured.



### Shade classification:

Enamel / A-D combination	BL3	A1	A2	A3	A3,5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
E1	Univ.	X					X				X				X		
E2			X	X				X									
E3					X				X	X		X	X			X	X
E4						X								X			

In the direct layering technique and in the inverse layering technique, shade classification for the desired shade is based

on the classic A-D shade system (analogously to the combination table).



crea.lign Incisal Stains & GUM

The transparency and effect of depth of the veneers are enhanced with Incisal Opal which does not contain any pigments and is not fluorescent. E4 does not contain any white pigments and is used to adjust the brightness / to darken the



crea.lign dentin

veneer. As a result, the requirements for dentures in geriatric dentistry and minimally invasive restorations, such as veneers, can be fulfilled even in cases of limited space and thin layers.



Photos: Lab. Od. Lazetera Antonio, Savona, Italy



In the visio.lign system, E1 to E4 incisal materials are used for free-hand layering and the cut-back technique. In the cut-back technique, the veneers or teeth are reduced, conditioned and

the effect incisal materials opal, blue, rose or universal are used in addition to the new incisal materials.

# crea.lign freestyle

## crea.lign stains and visio.paint

With the crea.lign stains, intensive materials which feature the familiar quality are available for customizing the shade. These material do not need to be layered over and are par-

ticularly suitable to intensify approximal spaces, incisal edges and fissures.



orange

Stains



brown



Photos: Lab. Od. Lazetera Antonio, Savona, Italy

Moreover, visio.paint „internal stains“ are available as liquid stains to be used for all resins and composites. visio. paint stains are incorporated using the cut-back technique or applied directly and layered over (coated). As a result, visio.paint stains are suitable for customizing monolithic CAD/CAM restorations or denture teeth. The stains are cured

with light and can be applied directly to the veneer or mixed with layering materials using a brush. By further layering with crea.lign materials, shade stability comparable to ceramics can be achieved.



**visio.paint:**  
available from  
May 2013



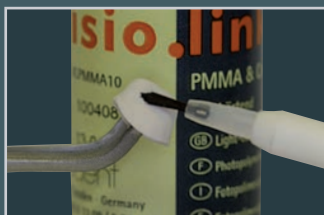
Photos: Lab. Od. Lazetera Antonio, Savona, Italy

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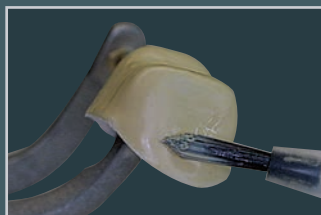
## freestyle with Gnathoflex



Gnathoflex Premium offers highly flexible silicone moulds to be used for simple and fast preparation of anatomical occlusal surfaces.



visio.link is applied to the Bio HPP coping, which was sandblasted with 110 µm aluminium oxide, and cured with light.



Light-curing crea.lign Opaker is applied and polymerized.



crea.lign opal is applied as a first layer to create space for adjusting the occlusion later on.



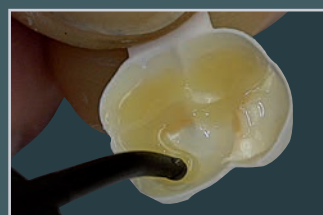
Curing for at least 15 sec is required after the application of each layer.



crea.lign stains are applied into fissures to increase the effect of depth.



crea.lign incisal should taper towards the margin..



The Gnathoflex mould is filled with crea.lign dentin and cured in the polymerization unit.



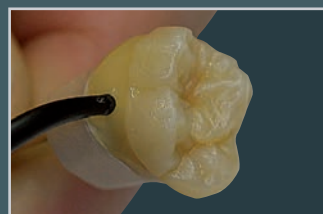
To fix the coping, a strip of crea.lign is applied.



The correct position is checked in the articulator and the occlusal is cured onto the coping. Previously, the bite was raised by 0.5 mm to compensate for the thickness of the Gnathoflex mould.



Afterwards the elastic Gnathoflex mould is removed.



The tooth mould is built up with dentin and incisal materials.



# MKZ EM-Aktivator

In addition to CrCoMo alloys, reduced gold content and gold-free precious metal alloys, such as silver-palladium, are more and more frequently used for the fabrication of substructures and suprastructures. Numerous metal primers and conventional silanizing do not ensure perfect bonding required for full veneers in the posterior area or for implant bridges.

MKZ EM-Aktivator was developed to achieve fully cohesive chemical bonding of the veneering resins / composites. The use of this adhesive, which is used\* together with MKZ Primer, allows to obtain bond strength values of more than 25 MPa in compressive shear strength tests of precious metal alloys (see research report of the Clinic of FSU Jena).

MKZ EM-Aktivator

MKZ Primer



**Conditioning precious metal and reduced precious metal alloys**

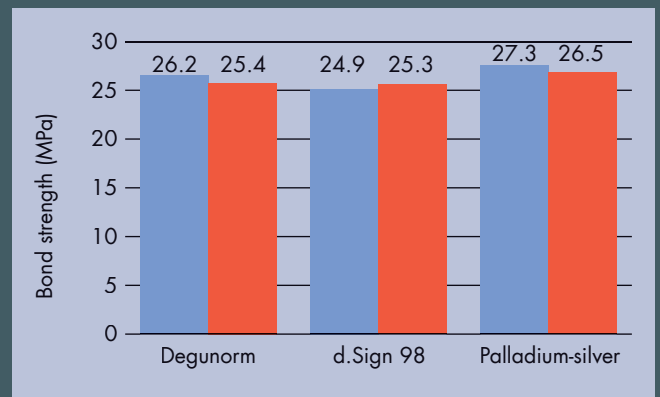
\*Important:

MKZ EM-Aktivator is only effective in combination with MKZ Primer. Mixing ratio 1:1, mix shortly and apply to the precious metal surface using a disposable brush.

Accordingly, MKZ Primer / MKZ EM-Aktivator can be used for conditioning all metal and ceramic substructure materials and a gold standard of more than 25 MPa is reached for the compressive shear strength of the entire veneer.

The dropper bottle with a yellow lid guarantees 100 % effectiveness of the primer throughout the entire service life of the product. MKZ EM-Aktivator is only mixed with MKZ Primer for conditioning precious metal alloys. The effect on ceramic, zirconium or titanium is not affected or reduced.

Bonding combo.lign (adhesive composite) to veneering composite - MKZ Primer + MKZ II Primer



K-Primer



Use a diamond tool to roughen the area to be repaired; do not cool with water. Apply generous amount of K-Primer and let it dry.

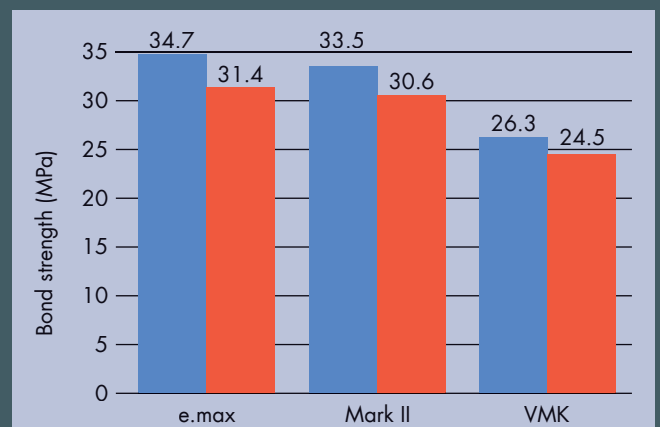


Apply suitably shaded composite, cure and polish.

Research report of the Clinic of FSU Jena.

1 day  
25,000 TLC

Bonding combo.lign (luting composite) to veneering ceramic - K-Primer



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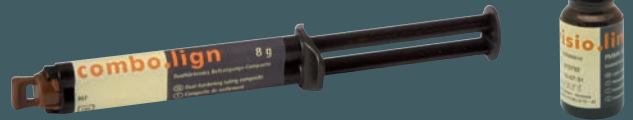


# Metal-free restorations - BioHPP

## Using combo.lign for bonding BioHPP

Crowns and bridges made from BioHPP are fabricated with the *for 2* press system. If the capacity of the muffle is not sufficient to fabricate a large restoration in a single casting process, a multi-stage procedure can be used. In this procedure, retentive attachments, such as bar attachments, are attached

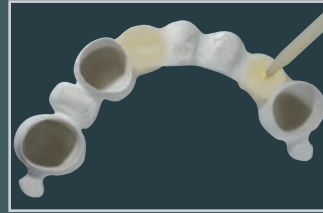
to the segments. The attachments ensure adequate retention of the individual elements on the model. Then BioHPP is conditioned with visio.link and bonded to the model using combo.lign luting composite. The adhesive gap should be at least 0.1 to 0.5 mm.



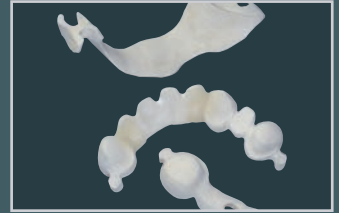
There are 4 telescopes in the upper jaw and 4 telescopes and 2 remaining teeth in the lower jaw for anchoring the removable restorations.



The BioHPP substructure was sandblasted, conditioned with visio.link and bonded using suitably shaded combo.lign.



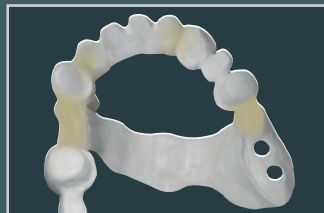
Basal view of the bridge bonded with combo.lign.



The BioHPP substructure consists of three parts which also need to be bonded with combo.lign.



The substructure elements are fixed on the model for bonding.



All individual elements were bonded with combo.lign and form a stable base for a stable and biocompatible denture.

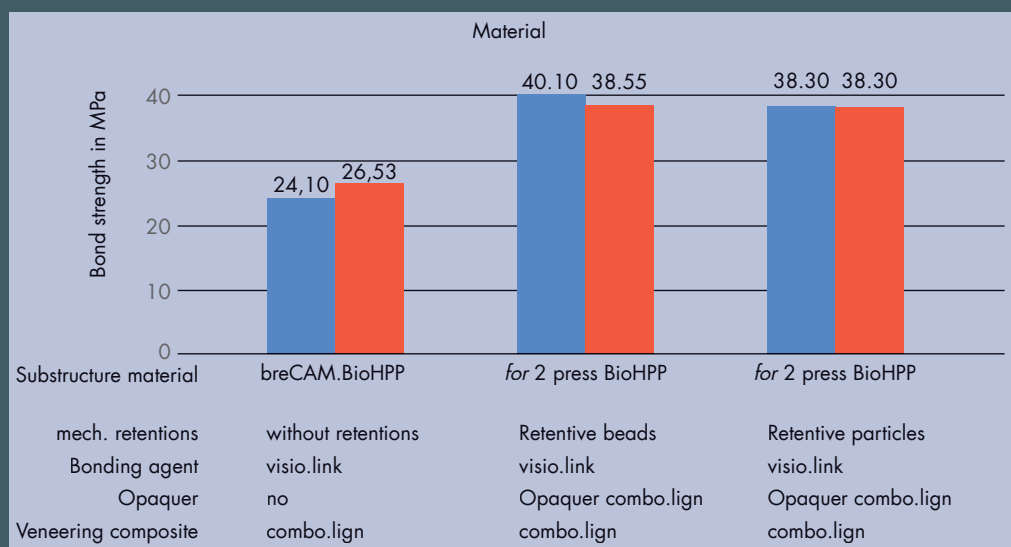


The completed denture in the patient's mouth. The transpalatal connector made from Bio HPP can be clearly seen.



Photos: Practice of Dipl.-Stom. Hirmer/Dr. Kather, Bad Lobenstein.

1 day 37° C  
Average values (after 25,000 TLC)



# neo.lign posterior teeth L-design

## neo.lign P, anatomically reduced occlusal surfaces

With the second generation of posteriors, the neo.lign range of full teeth is supplemented by 3 semi-anatomical designs. The L-design is based on a physiological lingualized occlusal with clearly reduced cusp inclination in the lower jaw and more space in the central fossa.

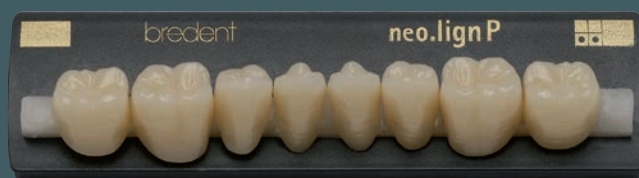
As a result, lingualized setups - tooth-to-tooth occlusion - can be achieved quickly and reliably. Thanks to the physiological tooth design (lingualized), tilting of upper teeth towards the buccal direction is no longer required; tooth axis and body provide a harmonious combination of function and esthetics. Tooth-to-two-teeth occlusion is also possible.



Tooth-to-tooth occlusion



Tooth-to-two-teeth occlusion



Photos: MDT Cristian Rohrbach, Frankfurt



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# Inverse Layering Technique

The Inverse Layering Technique describes layering of composite into the translucent visio.sil ILT key in a reverse order. crea.lign is suitable for the non-prep technique, minimally invasive

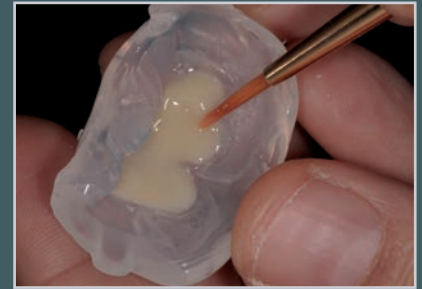
preparation, the fabrication of inlays, onlays and overlays and complex restorations with or without substructures.



Initial situation



Transparent visio.sil ILT is applied around the wax-up.



crea.lign materials are built up (layered) in the key.



After each layer, the key is placed on the model and fixed using a hand-held curing lamp. Final curing is carried out in the bre. Lux Power unit.



The veneers are finished with the visio.lign Toolkit.



The completed restoration in situ after adhesive bonding.

Photos: Vincenzo Musella, Modena, Italien



crea.lign brochure  
inverse layering technique  
56 pages  
Author:  
Vincenzo Musella  
Modena, Italien  
REF 000 482 0D

## visio.sil ILT



visio.sil ILT  
transparent  
silicone for keys  
50 ml  
REF 540 0140 0

visio.sil ILT was developed especially for the Inverse Layering Technique and the flasking technique. This transparent, addition-curing silicone for keys is distinguished by high final hardness of approx. 75 Shore A. It is flowable to fill the approximal space and to ensure perfect reproduction of the surface texture; however it is firm and stable and can be applied very precisely. Processing time: approx. 1.5 min. The key can be removed from the model after approx. 10 - 15 minutes. Final hardness of 75 Shore A is achieved for visio.sil ILT after approx. one hour.

# Red-white esthetics / Individualization

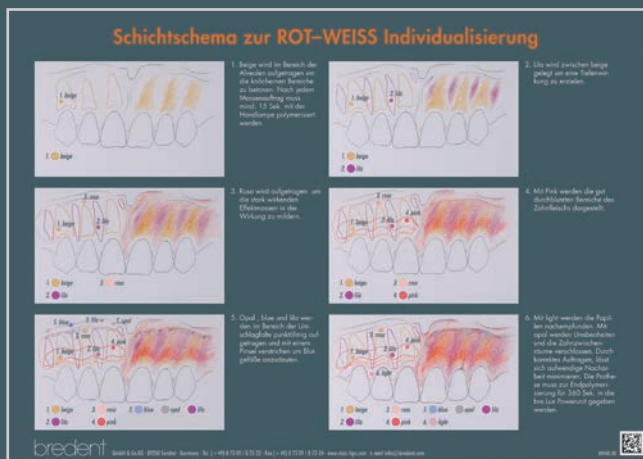
## Red-white esthetics set



The red-white esthetics set enables you to fabricate an esthetically appealing and lifelike denture in a few simple steps.



The difference between the two quadrants can be clearly recognized. The individualized (second) quadrant has a more natural and lifelike appearance. Each dental technician is enabled to achieve individualization in the anterior area within approx. 45 minutes.

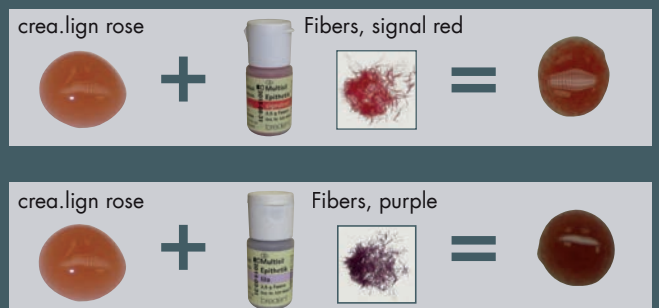


Layering instructions are enclosed to each red-white esthetics set.

In this case, Multisil Epithetics fibers were mixed with crealign for individualization of the gingiva.



Various shade effects are achieved by mixing crealign rose with Multisil Epithetics fibers. To avoid the formation of bubbles, a slightly thinner consistency can be obtained with crealign Modelling liquid.



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# Overview of new products

## Red-white esthetics set



REF CLIGNSETG

Contents:  
Layering instructions for red-white individualization

1x crea.lign blue  
1x crea.lign opal  
1x crea.lign beige  
1x crea.lign light  
1x crea.lign rose  
1x crea.lign pink  
1x crea.lign purple  
1x crea.lign red  
1x crea.lign Modelling liquid  
1x visio.link  
1x MKZ Primer  
1x GUM Opaker  
2x demo dentures  
2x Magic Brush No. 2  
1x single-hand grip  
1x mixing pad, 100 sheets  
10 application cannulas

## crea.lign Opaker



crea.lign Opaker 1 A1 / B2  
crea.lign Opaker 2 A2  
crea.lign Opaker 3 A3 / D3  
crea.lign Opaker 4 B1 / C1 / BL3  
crea.lign Opaker 5 C2 / C3 / D2 / D4  
crea.lign Opaker 6 B3 / B4  
crea.lign Opaker 7 A3,5  
crea.lign Opaker 8 A4 / C4  
crea.lign Opaker GUM GUM  
crea.lign OpakerSet 9 Opaker

REF  
CLFHOP01  
CLFHOP02  
CLFHOP03  
CLFHOP04  
CLFHOP05  
CLFHOP06  
CLFHOP07  
CLFHOP08  
CLFHOGUM  
CLFHOPSET



Demo denture  
REF 9925S400

## neo.lign L-design



neo.lign P lingualized

Posterior teeth posterior L 2

L2 UJ (14, 15, 16, 17/24, 25, 26, 27)  
L2 LJ (34, 35, 36, 37/44, 45, 46, 47)

Posterior teeth posterior L 3

L3 UJ (14, 15, 16, 17/24, 25, 26, 27)  
L3 LJ (34, 35, 36, 37/44, 45, 46, 47)

Posterior teeth posterior L 4

L4 UJ (14, 15, 16, 17/24, 25, 26, 27)  
L4 LJ (34, 35, 36, 37/44, 45, 46, 47)



MKZ Primer  
4 ml  
REF MKZ02004



MKZ EM-Aktivator  
4 ml  
REF MKZEM004



K-Primer  
3 ml  
REF APK25003



crea.lign Modelling liquid  
10 ml  
REF CLFMOD10



Multisil Epithetics fiber, signal red  
2,5 g  
REF 530 0060 3



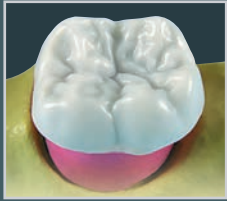
Multisil Epithetics fiber, purple  
2,5 g  
REF 530 0060 5



visio.sil ILT transparent silicone for keys  
50 ml  
REF 540 0140 0

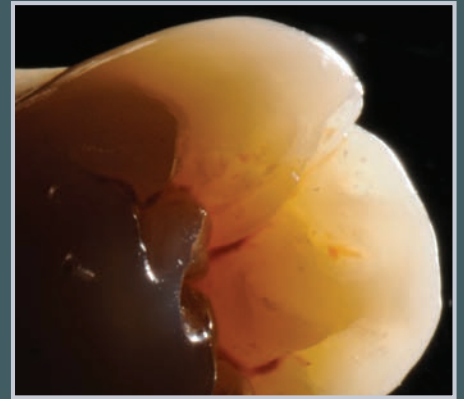


## Accessories



Assortments - Gnathoflex Premium:

16 pieces, cont. 16 moulds in size A, REF 429 P000 A  
16 pieces, cont. 16 moulds in size B, REF 429 P000 B  
16 pieces, cont. 16 moulds in size C, REF 429 P000 C  
48 pieces, cont. 16 moulds in 3 sizes ABC, REF 429 P004 8



Lab. Od. Lazetera Antonio - Savona - Italy

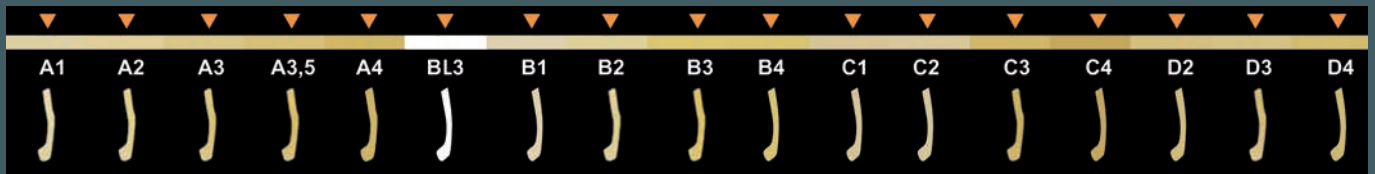


visio.link  
PMMA bonding agent  
10 ml  
REF VLPMA10

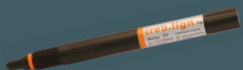


combo.lign  
luting composite

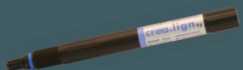
novo.lign veneers, combo.lign luting composite and  
crea.lign veneering composite are available in all shades  
of the classic A-D shade system.



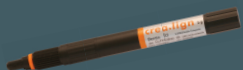
crea.lign freestyle Set  
Composite veneering set for free-hand layering  
REF CLIGNSETFN



17 dentin shades  
A-D 5 g each



Incisal E1 5 g  
Incisal E2 5 g  
Incisal E3 5 g  
Incisal E4 5 g  
Incisal opal 5 g  
Incisal universal 5 g



Modifier beige 5 g  
Modifier caramel 5 g



Stain orange 1,4 g  
Stain brown 1,4 g



Single-hand grip for  
crea.lign turn-  
type syringe 9 pieces  
empty



Opaker 1 4 g  
Opaker 2 4 g  
Opaker 3 4 g  
Opaker 4 4 g  
Opaker 5 4 g  
Opaker 6 4 g  
Opaker 7 4 g  
Opaker 8 4 g  
Opaker GUM 4 g



Modelling Liquid 10 ml



crea.lign  
syringe holder  
(tray included in the set)  
empty

REF CLIGNSET12  
also available separately  
12 crea.lign, 5 g each  
2 x stains à 1,4 g  
1 x Modelling Liquid 10 ml  
1 x tray (holder)  
12 x single-hand grip

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