

COMPOSITE MATERIAL FOR THE FABRICATION OF TEMPORARY CROWNS AND BRIDGES







"3" FOR TEMPORARY CROWNS AND BRIDGES WITH A SHEEN

Structur 3 is a self-polymerising composite material for the fabrication of provisional crowns and bridges, and is based on VOCO's tried and tested nano-hybrid technology. The three key requirements – processing, aesthetics and durability – have been significantly improved and dovetailed perfectly, enabling you to effortlessly create impeccable temporary restorations.

Processing

The 1:1 cartridge system with its accompanying mixing tips guarantees homogenous and error-free mixing, as well as even curing of Structur 3. When preparations for the impression have been completed, the material is applied and inserted into the patient's mouth. After a patient-friendly intraoral setting time of 45 seconds the material is still slightly elastic and can therefore be easily removed from the stump(s). Four minutes in total from commencement of mixing, Structur 3 is sufficiently polymerised for the finishing work on margins and contours to start.

On completion of curing, the temporary only has to be wiped with a cloth soaked in alcohol in order to remove the inhibition layer formed through contact with atmospheric oxygen. It is not necessary to carry out finishing with a rotary instrument, and this omission of the polishing step results in a noticeable reduction of your working time. Following the finishing step, the temporary can be fitted precisely with the help of a luting cement.

Aesthetics

Aesthetic aspects play a vital role in the fabrication of perfect temporary restorations. You are looking for a material with outstanding aesthetic properties to offer your patient. This material's natural gloss, achieved only by wiping off the inhibition layer, as well as its fluorescence, account for highly aesthetic temporaries. Structur 3 is available in 8 shades which enable you to match the patient's natural tooth colour precisely.

Durability

Temporaries are designed to protect the prepared tooth to safeguard the patient's masticatory functions. To fulfil these demands, the material's parameters need to meet the requirements with regard to durability. The temporary has to withstand everyday masticatory forces whilst at the same time preserving its original shade. It also has to fulfil the requirements for long-term temporaries which often take the place of the permanent restoration for several weeks or months in cases of extensive treatment. Neither you nor your patient would be pleased to have to rework the temporary due to fractures, discolouration or wear and tear.

This is exactly where Structur 3 is dependable: its compressive strength of over 500 MPa means that Structur 3 withstands perfectly the daily loads to which temporary restorations are exposed. Discolouration in temporaries may strongly affect your patient's aesthetic perception. Temporaries made from Structur 3 have a smooth surface that is easy to clean. The shade of the temporary remains stable for a long time and thus minimises any adverse effects on your patient's aesthetic perception.

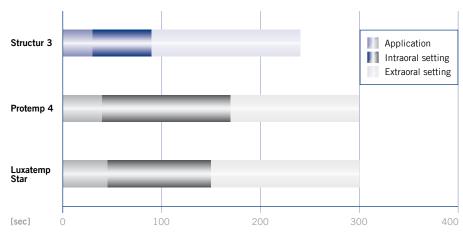
The result of Structur 3's improved parameters in respect of processing, aesthetics and durability is a product that enables you to save time and yet create temporaries that not only look good but are also extremely durable.



Dr. Frank Braden, Roetgen (Germany): "Over the course of the last two years I have tried various automix materials for the direct fabrication of provisional crowns and bridges. As none of those really proved satisfactory, I decided to test VOCO's Structur 3.

From the very beginning, I felt happy with the first temporary I was constructing. To date, I have completed several temporaries spanning greatly differing widths. These were constructed either by silicone pre-impression or using a deep drawing tray, and all of them have confirmed the initial positive notion."

ADVANTAGES AT A GLANCE



Short processing times

The short processing time of only 4 minutes in total is very important, not just for you, but also for your patient. Structur 3 enables you to create perfect temporaries in a way that is as patient-friendly as it is quick, as the intraoral setting time is a mere 45 seconds.

Source: Manufacturers' instructions for use

Optimum aesthetics

Structur 3's fluorescence compares with that of human teeth. This is another characteristic that contributes to the highly aesthetic appearance of temporaries made from Structur 3, making them difficult to distinguish from human teeth. The

images were taken in light conditions with a high degree of UV light present. The fluorescence of the tooth model made from Structur 3 equals that of natural teeth.



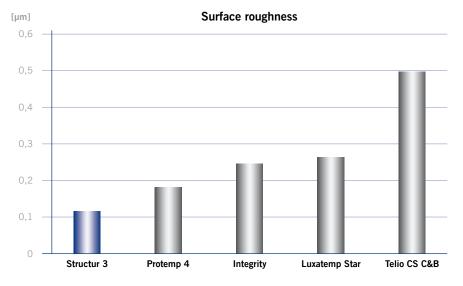
Natural tooth



Structur 3



Non-fluorescent temporary material



The chart shows Structur 3 as having the lowest level of surface roughness after having been wiped with a cloth soaked in alcohol.

The smooth surface makes it easier to remove plaque, so the shade of the temporary remains stable for longer and it thus retains its aesthetic appearance.

Source: Fleming et al., Trinity College Dublin, 2012

ADVANTAGES AT A GLANCE

Gloss without polishing

Temporaries made from Structur 3 provide a high gloss, even without polishing. It is sufficient to remove the inhibition layer with a cloth soaked in alcohol to make the surface appear smooth and aesthetic. Repolishing is not required, which means that you save time during treatment.



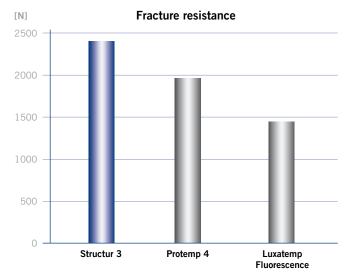
Plate and bridge made from Structur 3

Tremendously durable

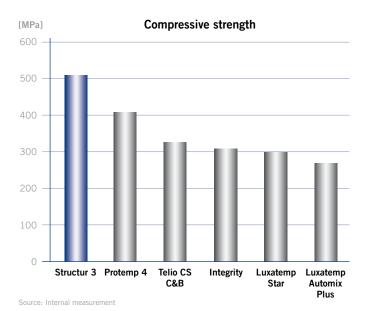
A temporary treatment needs to be durable in order to protect the prepared teeth and withstand masticatory loads. If this is not the case, fractures may potentially have to be repaired or temporaries reworked, which is costly.

In a study carried out at the University of Regensburg crowns were fabricated from the materials listed opposite, and their fracture resistance was examined. The findings of the study demonstrate that Structur 3 had the highest fracture resistance after simulation of 10 years of wear.

This confirms the tremendous durability of temporaries made from Structur 3- and gives you certainty that you can pass on to your patients.



Source: Dr. Reinhold Lang, University of Regensburg



At more than 500 MPa, Structur 3's compressive strength is the highest when compared to competitive products.

Protemp 4, Luxatemp Fluorescence, Luxatemp Star, Luxatemp Automix Plus, Integrity and Telio CS C&B are not registered trademarks of VOCO GmbH.

CLINICAL APPLICATION

Case 1



Following excavation of carious dentine



Prepared abutment teeth



Injecting Structur 3 into a deep drawing tray



Following removal during elastic phase: extraoral setting

Source: Prof. Jürgen Manhart, University of Munich



Finished temporary bridge



Structur 3 bridge in situ

Case 2



Initial situation



Prepared cores



Structur 3-filled impression in place on the core, intraoral phase of setting



Removal during elastic phase for extraoral setting



Finished temporary bridge



Appealing result

Source: Dr. Walter Denner, Fulda

FLEXIBILITY IN SHADE AND APPLICATION

Indications

Fabrication of provisional crowns, bridges, inlays, onlays, partial crowns, veneers and temporary posts

Fabrication of long-term temporaries

Lining of pre-fabricated temporary crowns made from composite materials, polycarbonate or metal



Presentation

REF 2500	Set cartridge 50 ml A2, dispenser type 2, accessories
REF 2501	Set cartridge 50 ml A3, dispenser type 2, accessories
REF 2158	Dispenser – type 2
REF 2261	Dispenser – QuickMix
REF 2185	Mixing tips type 6 for cartridge, 50 pcs.
REF 2189	Mixing tips type 10 for QuickMix syringe, 50 pcs.

Advantages

Processing

- Quick, simple and reliable thanks to the 1:1 cartridge system
- Short setting time
- Elastic phase allows simple removal from the prepared tooth
- Gloss without polishing only requires removal of the inhibition layer

Aesthetics

- Natural gloss and fluorescence
- Available in eight shades

Durability

- High compressive strength and fracture resistance
- Smooth surface reduces discolouration



Shade	Cartridge 50 ml, mixing tips type 6	Cartridge 5×50 ml, mixing tips type 6	QuickMix syringe 5 ml, mixing tips type 10
A1	REF 2503	_	REF 2515
A2	REF 2504	REF 2512	REF 2516
А3	REF 2505	REF 2513	REF 2517
A3.5	REF 2506	_	_
B1	REF 2507	_	REF 2518
В3	REF 2508	_	_
C2	REF 2509	_	-
BL	REF 2510	_	_

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