# INNOVATIVE DENTAL SOLUTIONS

omnin

from the Japanese development pioneer

Universal Bond







# THE MOTHER

The TOKUYAMA DENTAL Corporation – a traditional Japanese company



TOKUYAMA DENTAL draws on nearly a century of accomplishments and knowledge to gain a competitive advantage in today's dentistry. Operating on a global scale, our mission is to listen to your needs, incorporate your voice into the development of innovative products, and ensure our products meet the highest standards of quality. TOKUYAMA DENTAL is characterized by cutting-edge technology and developing specialty products that improve your daily life.

At TOKUYAMA DENTAL, our constant pursuit of excellence and innovation thrives from a strong link between our company, and visionary Dental Professionals who shape the future of dentistry.

TOKUYAMA DENTAL is 100% committed to Innovating Tomorrow's Dentistry, Today. Our spirit is embodied in five values which represent the vary essence of TOKUYAMA DENTAL and will always continue to do so.





TOKYO

[Tokyo Tower]

#### 1. Innovation

TOKUYAMA DENTAL is not looking to invent, we are looking to innovate. Innovation is the process of creating a product that provides a more efficient and faster way for you to achieve a desired result. TOKUYAMA DENTAL is dedicated to improving the lives of you and your patients'.

#### 2. Product Efficacy and Replicable Results

TOKUYAMA DENTAL products are submitted to rigorous testing that simulate intra-oral environments, prior to invo-testing. It is our number one priority that Tokuyama Dental products always perform at or above clinical expectations.

#### 3. Quality

TOKUYAMA DENTAL is sure to take utmost care when manufacturing, packaging, storing, and shipping products, to ensure all attributes of our products perform to customer satisfaction.

#### 4. Customer service and satisfaction

TOKUYAMA DENTAL treats our customer like family, and as such, we are determined to offer quick and easy solutions for our customers. Providing superior customer service is our primary mission.

#### 5. Social responsibility

Market launch

Omnichroma

TOKUYAMA DENTAL is committed to Corporate Social Responsibility by contributing to economic development, while improving the quality of life of our workforce and their families, as well as the local community and society at large.

Move to the

2016

new company headquarters 2019 Establi of Tok Dental A togeth

Establishment of Tokuyama Dental Academy together with Tokuyama Dental Italy

Restructuring of the parent company

2020 (Vision 2021 and Mission 2025)



# THE DAUGHTER

TOKUYAMA DENTAL Deutschland GmbH – from Münster to Northern Europe

TOKUYAMA DENTAL Germany is the subsidiary for the distribution of dental products in Germany, the Czech Republic, Slovakia, Hungary, Poland, Austria, Switzerland, Liechtenstein, Luxembourg, Belgium, the Netherlands, Ireland, Great Britain, Iceland, Norway, Denmark, Sweden, Finland, Estonia, Latvia and Lithuania. The sales office of TOKUYAMA DENTAL Germany is located in Altenberge – near Münster. From this location, dentists and dental dealers in Germany and the aforementioned European countries are supplied and supported with dental products.

A modern service concept supports dentists and dealers

personally and competently in the use and distribution of dental materials in these areas.













Multiple award-winning filling materials

BONDINGS

Adhesion-State of the Ar



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CEMENT

IMPRESSION MATERIALS

Precise even under adverse conditions



DESENSITISER

For hypersensitive denti

**RELINING MATERIAL** 

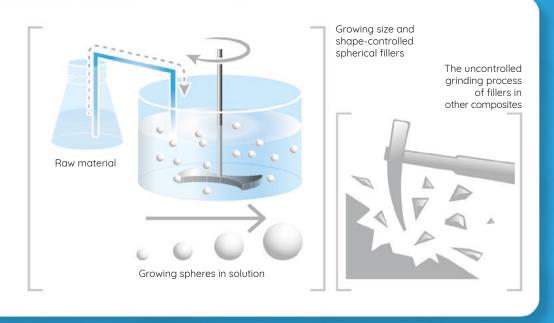
ard and durable soft materia



# COMPOSITE

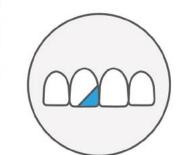
### **Spherical fillers –** combining aesthetics and resilience

The production – Sol-Gel vs. conventional grinding process



An intensively thought-out and innovative development concept has given rise to the exceptional composites ESTELITE and OMNICHROMA. Size- and shape-controlled spherical sub-micro fillers obtained in a fine manufacturing process (Sol-Gel) set new standards for aesthetic composite restorations. Many years of development of the manufacturing process for fillers with special aesthetic, physical and user-friendly properties are the basis for the outstanding result.

Thanks to the unique fillers, ESTELITE as well as OMNICHROMA are extremely user-friendly to work with, as they do not stick to the spatula and are easy to polish.



omicipat

STUIL ASTERIA

#### **Keyfacts Composite**

- > Distinct chameleon effect & unique aesthetics
- > Excellent polishability & gloss

BULY

> Universal composites and specailists for all indications

夜 Tokuyama



# OMNICHROMA

1000 Shades of White – all in 1 single syringe! Infinitely colour adjustment from A1 to D4



Find out more

#### Structural colour

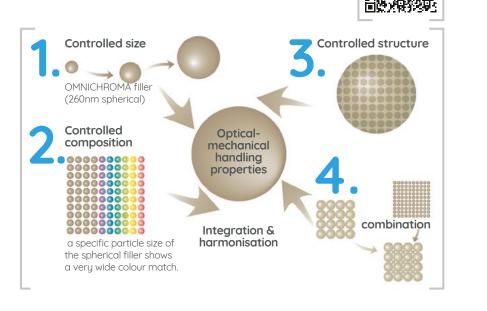
Natural colouring without artificially added colour pigments thanks to Smart Chromatic Technology. Bis-GMA-free formulation for increased biocompatibility.

#### Simplified stockpiling

Order and store only one colour – always the right colour at hand. No more expired special colours.

#### **Time saving**

No more tedious and timeconsuming colour determination – start immediately.



Every dentist's dream come true: always the right colour at hand!"

Drs. Erik-Jan Muts, MSc, Apeldoorn (NL)



# OMNICHROMA BLOCKER

The ideal supplement to OMNICHROMA if the automatic colour matching could be compromised.



#### **Discolourations**

Reliably covers disturbing colour influences, e.g. after amalgam removal.

#### **Discolourations**

Reliably covers disturbing colour influences, e.g. after amalgam removal.

#### **Oral cavity**

Prevents disturbing colour influences from the oral cavity and prevents grey shimmer.



OMNICHROMA (1mm cured)



OMNICHROMA BLOCKER



OMNICHROMA + BLOCKER

Find out more



#### // • • • • • • • • • •

Amalgam tattoos and endocavities can be reliably covered with the Blocker. The layer thickness depends on the degree of discolouration and the depth of the cavity."

Dr. Tom Verhofstadt, Kevelaer

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# OMNICHROMA FLOW

The logical further development of OMNICHROMA – 1000 Shades of White in 1 single syringe now also as flowable.



#### Structural colour

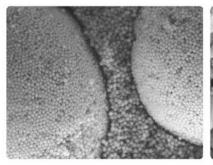
Natural colouring without artificially added colour pigments thanks to Smart Chromatic Technology. Bis-GMA-free formulation for increased biocompatibility.

#### Flowability

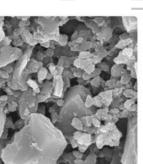
Optimum flow behaviour and excellent cavity adaptation.

#### Load capacity

Suitable for both anterior and posterior teeth thanks to excellent physical properties.



Omnichroma FLOW (TOKUYAMA DENTAL; 1 µm; 5,000x magnification)



Find out mor

Venus Flow One, Kulzer (1 µm; 20.000x magnification)





The addition of a flow variant to this product idea is absolutely to be welcomed and rounds off the application possibilities excellently." Prof. Dr. Claus-Peter Ernst, Mainz



# OMNICHROMA FLOW BLOCKER

The tried and tested OMNICHROMA BLOCKER against disturbing colour influences – now also available as a flowable version.



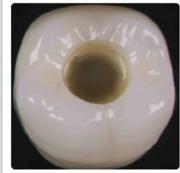
#### Opacity

Reliably eliminates interfering colour influences for an aesthetically correct colour match.

#### Flowability

Optimum flow behaviour for rapid lining of posterior cavities

Versatility Universal cover shade for various indications





Find out more

With Chroma Zone Black

Blocker 1 mm



More at COMPOSITES >> ESTELITE COLOR



# OMNICHROMA FLOW BULK

Completes the OMNICHROMA family – 1000 Shades of White all in 1 single syringe, now also with depth curing.



Without artificial colour pigments Adapts "automatically" to the tooth colour

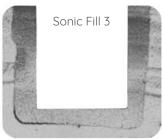
BisGMA – free formulation for better biocompatibility

No capping layer necessary excellent load-bearing capacity



Typical laser microscope images of the individual cavity adaptations





Source: TOKUYAMA DENTAL R&D

Customers also bought this additional product: OMNICHROMA BLOCKER FLOW

More at COMPOSITES >> OMNICHROMA BLOCKER FLOW







# AWARD-WINNING!

Not just good – multiple awards and distinctions apply to many of the materials from TOKUYAMA DENTAL.



#### OMNICHROMA

Recognised as the biggest innovation in the dental sector immediately after its launch, now the leading one-shade composite.







#### **OMNICHROMA FLOW**

The flowable version OMNICHROMA FLOW is also a leader in the field of single-colour composites or flowables. Also recognised as a problem solver for invisible aligner fixings.



#### ESTELITE Σ QUICK

A class of its own. Awarded best universal composite 12 years in a row. What composite can boast such a track record?





# ESTELITE ASTERIA

An innovative and highly simplified layering concept for maximum aesthetics – perfect restorations are achieved for every user.



#### Enhanced chameleon effect

Increased light diffusion inside the material leads to a pronounced chameleon effect. Only a few basic colours are sufficient for a highly aesthetic result.

#### Simplified layering technique

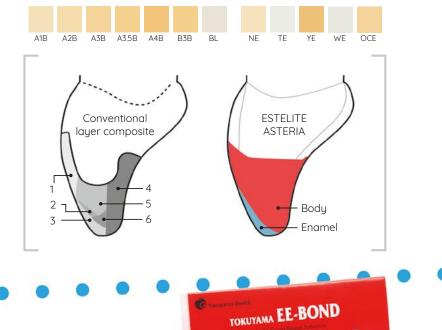
Optimally coordinated dentin shades with increased opacity and enamel shades with increased translucency. Restorations with strong character even without complex layering techniques.

#### **Optimum gloss**

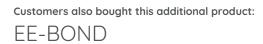
Spherical fillers that, thanks to their shape, can be polished in seconds – for outstanding aesthetics.



Qe ETEITE ASTERIA



Intro Ki



More at BONDING >> EE-BOND



# ESTELITE COLOR

Expressive stains for individual characterisation of the respective restoration.



#### Colours

9 different shades make teeth look younger or older. Even fissures or pits can be imitated naturally.

#### Opaque

4 opaque shades provide reliable coverage of heavily discoloured areas. Also suitable for covering metal or for repairs.

#### Flowability

Due to their consistency, the stains are easy to apply and can be individually shaped with a small probe or the TOKUYAMA brushes.



ESTELITE COLOR is applied evenly over the discoloured areas to raise the colour value.

is After light curing, a

layer of dentin shade



Find out more

After light curing, the enamel shade is applied.

dark brown

l areas to with the desired shade and saturation is applied over the opaquer.



Customers also bought this additional product: Brush No.24

More at >> www.tokuyama-dental.eu



# Reattachment of a fragment

Minimally invasive procedure to restore functional and aesthetic parameters

Prof. Simone Grandini & Dr. Giulio Pavolucci, Siena (ITA)



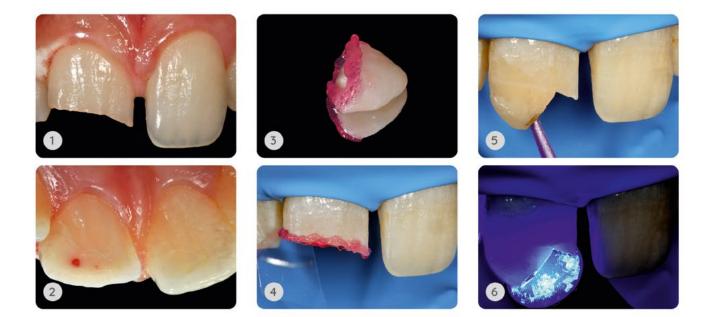
There are many different techniques available for restoring traumatised or aesthetically inadequate anterior teeth. Most require a multi-layer technique, which is often extremely complicated for the general dentist. Now there is a simpler procedure with a material that requires only a two-layer technique (dentin and enamel), as in this young patient.

The 9-year-old patient Y. came to our practice after a trauma in the anterior region. It was determined that it was a simple accident (the boy had fallen while playing with friends).

The subsequent examination revealed a fracture (Ellis Class III with pulp exposure) of tooth 1.1, physiological mobility of the tooth and other teeth, mild swelling of the upper lip, mild pain and poor plaque management. (Fig. 1-2) The patient had brought the broken fragment, which was immediately placed in physiological saline solution.

As the pulp exposure was minor and not bleeding, it was decided to fix the fragment again and reconstruct the missing part directly.

After local anaesthesia with articaine, the surgical area was prepared. Placement of the rubber dam was quite difficult due to the mixed dentition. The surface was carefully cleaned with a toothbrush. The adhesive system Tokuyama EE-Bond (7th generation with enamel etching) was then applied to the tooth and the fragment. The fragment was repositioned with a thin interposition of flowable composite. (Figs. 3-5)













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After curing (Fig. 6), a bevel was created along the fracture line vestibularly and palatally to increase the adhesion of the fragment (Figs. 8-9), smooth the edges and allow direct reconstruction of the missing part.

After reapplication of the adhesive system (Fig. 10), a freehand layering was carried out. (Fig. 11)

The first aesthetic examination had revealed a clear incisal translucency and a distinct halo at the edge.

NE (Tokuyama Asteria) was applied as the first palatal layer. Afterwards,

the build-up was done with Body A2. According to the manufacturer's instructions, Body was applied up to the middle third, leaving space for a thin layer of enamel NE on the incisal third. (Fig. 12)

To create the enamel translucency, TE was used between the body incisal cusps. The halo was created with Body A2. (Fig. 13)

After finishing (Fig. 14) and polishing (Fig. 15), the patient was discharged home and regularly questioned about possible pulpal symptoms in the following days.





The control image after 7 days (Fig. 16) shows the excellent integration of the restoration. Due to the integration of the composite used and the simple layering technique, we were able to achieve a satisfactory result immediately, so that no further treatment was required.

The body shade did an excellent job of covering the transition line between the tooth and the restoration. With the help of enamel-NE and translucent TE, an absolutely natural incisal area has been created.

The patient was satisfied with the aesthetic result of the restoration. The last picture shows the postoperative check after one week and rehydration of the adjacent teeth.



# ESTELITE Σ QUICK

The classic – our awardwinning universal composite for all requirements and indications.

#### Excellent

Awarded best universal composite by Dental Advisor 12 years in a row – for highest demands on gloss, aesthetics and polishability.

#### Strong chameleon effect

Strong in colour matching – this is how restorations that blend harmoniously and invisibly into the tooth environment can be achieved even without complex preparations.

#### **RAP-Technolgy**

Radical Amplified Photopolymerization – this is the magic formula for accelerated curing with a high conversion rate at the same time.



#### Shades - 20: A2 A3 A3.5 A4 A5 B1 B2 B3 **B**4 C1 C2 C3 BW WE CE(Inc.) OA1 OA2 OA3 OPA2

Tokuyama Denta

KIT

Universal Bond II



More at BONDING >> UNIVERSAL BOND II



# ESTELITE POSTERIOR

Strong under pressure – when a particularly resilient material is required for the posterior region.



#### Novel combination

A combination of spherical and classic ground fillers creates an optimal filler distribution – for a high filler content.

#### Radiopacity

Highly visible filler particles allow optimal control of the placed fillings – for a safe feeling.

#### Resilience

High E-modulus, strong compressive strength – optimal physical values for the strongest loads, whether crunchers or not. Shades – 4:



compressive strength [MPa]	0.0 100.0	200.0	300.0	400.0 500.0
ESTELITE POSTERIOR QUICK				
etric EvoCeram				
G-aenial Posterior				
Fradia Direct Posterior				
/enus Diamond				
ESTELITE POSTERIC		( with 4	143 MF	Pa



Customers also bought this additional product: BOND FORCE  $\rm II$ 

More at BONDING >> BOND FORCE II



# ESTELITE UNIVERSAL FLOW

Simply flowable? No, triple flowable for all indications and preferences.

#### **3 viscosities**

Different viscosities always offer the user the optimal choice for every occasion.

#### **Increased light diffusion**

Increased light diffusion causes a strong scattering of the incident light inside the material. This creates a pronounced chameleon effect for a minimum of colours.

#### Resilience

The combination of round composite fillers and spherical fillers ensures strong resilience - comparable to pasty composites.





SuperLow Stable against uncontrolled flowing away

Medium Universally applicable for all indications

#### High

Ideal for fissures or for lining







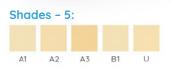
Always the right viscosity with perfect polishability make this flow the agent of choice ."

Dr. Markus Lenders, Nettetal



# ESTELITE BULK FILL FLOW

Deep curing at the touch of a button – reliable and relaxed without stress.



ESTELITE BULK FILL Flow

STELITE BULK FILL Flow



Tokuyama Denta

#### Novel composite filler

Spray granulation creates an edgeless composite filler from the spherical fillers – round fillers for reduced polymerisation stress with simultaneous deep curing.

#### **Controlled refractive index**

Initially translucent for a deep cure the refractive index reverses upon curing – for an opaque and aesthetic result.

#### No capping layer

The novel combination of fillers ensures optimal resilience. The controlled refractive index ensures an appealing result. Two reasons why the otherwise obligatory capping layer can be omitted.



ESTELITE BULK FILL FLOW: Composite filler ("rimless")



Conventional composite: inorganic fillers (irregular)



Customers also bought this additional product: BOND FORCE II PEN

More at BONDINGS >> BOND FORCE II PEN



# Tooth forming with composite



#### Tooth reshaping with composite after tooth transplantation in the anterior region

History: After a fall in a swimming pool in 2000 and a total dislocation of the two central incisors 11 and 21 (both teeth were lost in the fall), teeth 34 and 44 were transplanted in region 11 and 21. Seven years later, the patient, who had been satisfied with the restoration up to that point, presented for a consultation regarding the further restoration of the transplanted premolars. Orthodontic treatment with regular radiographic control of region 11/21 was carried out in parallel. The apical region of the transplanted premolars was inconspicuous, there was no evidence of root resorption.

**Treatment planning:** After evaluating the clinical and radiographic findings, the plan was to minimally invasively reshape the grafted premolars 34 and 44 into central incisors. Other treatment alternatives such as the fabrication of all-ceramic veneers and the performance of a surgical crown lengthening (vestibular) to harmonise the gingival line were rejected by the patient for reasons of invasiveness.

**Treatment procedure:** First, a wax-up (Fig. 2) was made to inform the patient about different treatment options and to evaluate the expected loss of substance due to preparation measures.

Based on the silicone key fabricated on the wax-up, an intraoral mock-up

Fig. 1a, b: Transplanted premolars in region 11/21, composite copings from orthodontic treatment still in situ







Fig. 2: Wax-up of region 11/21 and drawn-in suggested course of the gingival margin after surgical crown lengthening.

was fabricated with a provisional plastic material to visualize the targeted treatment results. Due to the thickness of the wax-up and the position of the transplanted premolars in the dental arch, it was agreed with the patient, who was very satisfied with the mock-up, Prof. Dr. Anne-Katrin Lührs, Hannover

to shape the restoration more delicately in a vestibular direction.

The teeth were now cleaned with fluoride-free prophylaxis paste. Then the shade was selected and the material Estelite Sigma Quick (Tokuyama, Altenberge) was used as the composite system.





Fig. 3a, b: Situation after removal of the composite flaps (a), intraoral mock-up for visualisation of the possible treatment result (b).

This system contains an extra-opaque dentin material, OPA2, which was used to build up the incisal dentin core that is not supported by tooth structure.













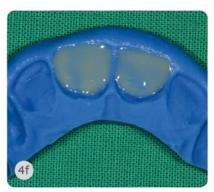
















Fig. 4a-m: Premolar remodelling 11 (analogous procedure was followed for 21): Wax-up with silicone key (a), silicone key in situ (b), enamel conditioning (c), etching pattern vestibular (d) and palatal (e), flowable in the silicone key (f), built-up posterior wall (g), layering of the dentine core (h, i), enamel mass 11 (j) and 21 (k), restorations after final polishing of vestibular (f) and palatal (m).







Fig. b. 6a, b: Reshaped premolars after 4.5 months postoperatively, view from vestibular (a) and palatinal (b)

Fig. 7a, b: Composite restorations after 14 months postoperatively, vestibular view (a) and palatal view (b)

The following shades were used: OPA2, OA2, OA3 (dentin shades), A2, A3 (enamel masses), CE (Clear Enamel, effect shade for translucent effects), OPA2 (Flowable).

Fig. 5a, b: Clinical situation 4 weeks postoperatively, view

from vestibular (a) and palatinal (b)

The enamel surface of the grafted premolars was minimally invasively roughened with a finishing diamond and then conditioned for 30 seconds using 37% orthophosphoric acid (Conditioner 36, Dentsply, Constance) and adhesively pretreated (Heliobond, Ivoclar Vivadent, Ellwangen).

With the help of a silicone key, the posterior wall was now built up from the flowable of shade OPA2 in a thin layer thickness. The different dentin materials were then modelled in several layers: OPA2 as opaque core, OA3 cervical and OA2 incisal.

An approx. 1 mm wide area was left free in the area of the incisal edge, which was filled with a thin layer of effect material (CE). A very thin layer of OA2 was added directly to the incisal edge to achieve the "halo effect". The dentine core was then coated with the enamel materials (A2 incisal, A3 cervical).

After final polishing, the teeth were fluoridated (Biflourid, VOCO, Cuxhaven). The illustrations above show the restorations at follow-up appointments after 4 weeks, 4.5 months and 14 months.

Follow-up sessions were arranged with the patient at 6-month intervals after completion of treatment.



**Epicrisis and discussion:** The patient case presented represents the reshaping of two premolars after autogenous tooth transplantation following anterior trauma, in which both central incisors were totally luxated and were not available for replantation because they could no longer be found.

With regard to the reshaping of transplanted premolars into anterior teeth, there are individual case reports in which both composite restorations and all-ceramic veneers were fabricated as a therapeutic measure for tooth reshaping.

In this case, minimally invasive composite restorations were fabricated at the request of the patient, who was informed about a wide variety of procedures. The posterior wall was built up from a very thin layer of Flowable using a silicone key after a previous wax-up. Since the occlusal contacts are in the area of the tooth structure, this procedure proved to be practicable.

The patient is satisfied with the treatment result achieved. During the observation period of 14 months, there were no indications of restoration failure.

### These products have been used :

#### **ESTELITE Σ QUICK**

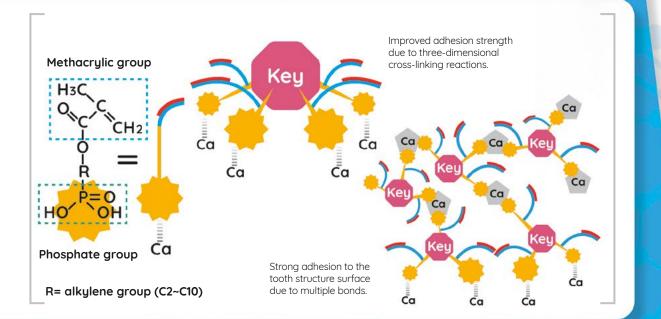
Donad ESTELITE UNIVERSAL FLOW Medium

ESTELITE UNIVERSAL FLOW Medium



# BONDING

The 3D-SR-Monomer – a self-reinforcing adhesive monomer



Tokuyar

Tokuya

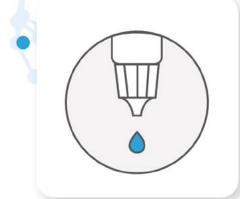
Universal Bond

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The extraordinary adhesive strength of TOKUYAMA adhesive systems is based on a technologically unique monomer, which has been modified and optimised in the 2nd and 3rd generation so that additional reaction chains of different lengths form various multiple bonds on the molecule and produce an extremely strong and tear-resistant adhesive layer in a very short time.

Through numerous chemical and mechanical bonds to the apatite of the tooth surface and the calcium ions of the tooth substance, the self-reinforcing monomer creates a 3-dimensiona network. In addition, the latest generation of the 3D-SR-Monomer has the well-known adhesive monomer 10-MDP, which has been proven to form strong adhesive mechanisms.





#### **Keyfacts Bonding**

- > Reliable adhesion through innovative technologies
- $\ensuremath{\triangleright}$  Quick and easy applications to minimise application errors
- $\boldsymbol{\boldsymbol{\flat}}$  Universal allrounders or special adhesives for special indications



# UNIVERSAL BOND II

The bedrock of dental restorations – standardised application on any surface.



Tokuyama Universal Bond II KD Self-cured Dental Universal Adhesive

#### No light curing

UNIVERSAL BOND II reacts by contact curing (BoSE technology). This eliminates the usual light curing and saves time during application.

#### **Standardised work**

No matter which surface – just 3 steps apply: Mix – Apply – Air blow – DONE! This minimises errors.

#### **Visual control**

The cleverly coloured liquids show the user the individual steps via colour change – full control.



Full visual control of the individual work steps thanks to the unique color change





The new UNIVERSAL BOND II from Tokuyama Dental can rightly be called universal bonding. It is easy to handle and achieves comparable results to previous bonding systems with fewer working steps. In combination with ESTECEM II PLUS, it was possible to realise an aesthetically good restoration for our patient."

Gordon Kautzsch, Leipzig



# EE BOND & ETCHING GEL HV

The specialist for selective enamel etching – an unbeatable duo.

#### Selective

Strong and reliable on the enamel as with Etch & Rinse systems – excellent marginal seal.

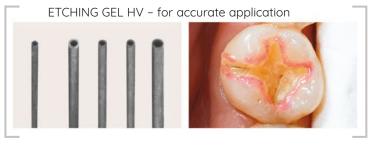
#### Selective

Gentle to dentin as with self-etch systems – no hypersensitivities.

#### Exact

A highly viscous etching gel with the finest needle ensures precise application without uncontrolled flowing away.





токиуама ЕЕ-ВОЛД



Customers also bought this additional product: ESTELITE ASTERIA

More at COMPOSITES >> ESTELITE ASTERIA



# **BOND FORCE II**

All-in-One - the reliable 7th generation adhesive.

#### Quick

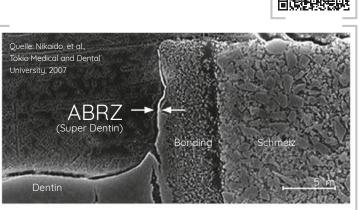
Only 25 seconds - this is how quickly the adhesive conditioning of the cavity can succeed.

#### Reliable

The innovative 3D-SR-Monomer forms a uniformly thin film layer optimal cavity adaptation.

#### Fluoride release

A constant release of fluoride from the adhesive protects against postoperative sensitivities and secondary caries.



Find out more:

TOKUYAMA BOND FORCE I

Tokuyama Dental

#### Super Dentin

Due to the chemical reactions of the functional monomer, so-called "super dentin" is formed in the adjacent dentin layer, which is resistant to acid and base attacks and thus protects the tooth from secondary caries.

Customers also bought this additional product: ESTELITE Σ QUICK

More at COMPOSITES >> ESTELITE  $\Sigma$  QUICK



# BOND FORCE II PEN

#### Ball pen

Easy to use – just 2 clicks are enough to dispense the required material in a hygienic and user-friendly way.

#### Safe'n Easy principle

The pen is securely closed with a simple twist of the cap. The filling level can be easily read in the viewing window.

#### **Application quantity**

ESTELITE BULK FILL Flow

The application quantity is always dispensed in uniform drops, so that optimal economical dosing is possible. This avoids surpluses and guarantees gentle handling of the material.







More at COMPOSITES >> ESTELITE BULK FILL Flow



# CEMENT

BoSE technology – the key to universal applicability and eliminating the need for light curing



ESTECEM II PLUS is a composite cement for the entire indication spectrum of indirect luting. Thanks to the TOKUYAMA UNIVERSAL BOND II included in the system, ESTECEM II PLUS can be used universally on all prosthetic surfaces without restrictions. Without additional primers or activators, the same procedure always applies to all surfaces: mix 1:1, apply, blow, done!

This is made possible by the patented BoSE technology, which, compared to conventional benzoyl peroxide/amine systems, has a high catalytic activity even under acidic conditions. This achieves a standardised conditioning of all surfaces, which are ready for adhesive cementation thanks to contact curing – without further polymerisation.





#### Key facts cement

- > Universally applicable
- > Reliable thanks to adhesive luting
- > Easy handling and working



### ESTECEM II PLUS

The adhesive allrounder – attaches indirect restorations regardless of the material.

#### **Colour stability**

No solubility after light curing – colour stability and no wash-out of the margin.

#### Viscosity

Optimum viscosity – no uncontrolled flow of the paste.

#### Handling

Good processing – easy removal of the excess.







SEND PIDS Internet



Customers also bought this additional product: UNIVERSAL BOND II

More at BONDING >> UNIVERSAL BOND II



# POSTS

Root posts made of quartz fibres form a solid foundation for prosthetic restorations.

#### **Keyfacts Root pins:**

#### Anatomical shape

The optimised design supports the main models of Ni-Ti instruments, protecting the dentin within the root canal.

#### Excellent load-bearing capacity and flexibility

The dentine-like flexural properties guarantee a long durability of the restoration. The risk of root fractures is thus minimised.

#### Translucency

The extremely high translucency of the quartz fibre post ensures successful light-curing of the luting cement, e.g. ESTECEM II Plus, in the apical area.

#### Radiopacity

The ideal radiopacity enables accurate diagnosis in the future.

#### **Calibrated drill**

The TokuDrill for removing dentin has a slightly larger diameter (+0.05 mm) than the quartz fibre posts to ensure an even, thin layer of cement.

#### Colour coding

For quick size determination, the quartz fibre posts have colour-coded heads.

#### **High biocompatibility**

The quartz fibres minimise the risk of allergies and thus contribute to patient safety.

#### Verifier

The autoclavable carbon pin is used to check and determine the length and dimensions of the root canal.



NEW X-RAY

# TOKUPOST

Not just a glass fibre post – quartz fibres provide multiple benefits.

#### Translucency

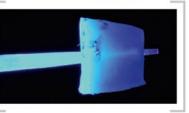
Crystal clear quartz fibres offer better transmission of polymerisation light – safe curing up to the apical area.

#### Unidirectional

The quartz fibres are arranged unidirectionally for dentine-like resilience. The dense bundling also provides stability.

#### Surface

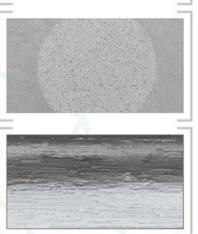
During production, the posts are roughened with brushes to obtain a micro-retentive surface – for better adhesion.



Tokuyama Dental

TOKUPOS

MASTER.15R/18





C Tokuyama Dental

KIT

Tokuyama Universal Bond II Self-cured Dental Universal Adhesive



Customers also bought this additional product: UNIVERSAL BOND II

More at BONDING >> UNIVERSAL BOND II

### 🕝 Tokuyama

### It is also universal to be able to cover many indications with one material.



**Gerhard Dalheimer,** Schwalbach

Dental restorations require many perfectly coordinated work steps with excellent materials. Universal adhesive systems can be used to make the workflow clear and efficient. Together with Tokuyama Dental, we looked for four practices that are clinically testing the truly universal adhesive system Universal Bond II and present their experiences in the form of case reports. In the following article you can read how dentist Gerhard Dalheimer from Schwalbach/Elm used the materials in different situations to the satisfaction of his patients.

Dentist Gerhard Dalheimer has been in private practice in Schwalbach/Elm for 28 years. Over time, he has specialised in the areas of Cerec and CMD + prosthetics and treats his patients together with his colleague Dr Hasan Ackay.

Efficiency is a very important factor in everyday dental practice and, against the background of constantly rising costs, materials such as Universal Bond II and ESTECM II PLUS from Tokuyama Dental are good alternatives to previous materials because they enable a universal and correspondingly time-saving method of working. The following four patient cases show how dentist Gerhard Dalheimer used these materials in clinical trials to the complete satisfaction of the practitioner and the patients. Case 1: Bonding a veneer to tooth 13

The 70-year-old patient presented because the veneer on 13 had come loose (Fig. 1a). After inspection of the tooth and the veneer, the reattachment could be started. The veneer and the tooth were cleaned of the old cement and then it was tried on again.







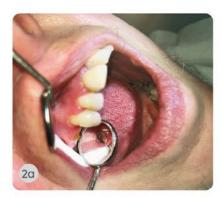








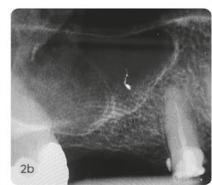
2c























The veneer and the tooth were then cleaned with alcohol and dried, the Universal Bond II (A/B) was mixed and applied to the veneer and the tooth and blown (Figs. 1b and 1c). The Universal Paste was applied to the veneer and placed on the tooth (Fig. 1d). The excess was removed after 3 sec. of light curing and then cured again from the vestibular and palatal sides for 1 min. each (Fig. 1e). The result is very satisfactory after a very short treatment (Fig. 1f).



## Case 2: Cementation of a post in preparation for a bridge abutment on tooth 14

The 56-year-old patient has been under our care for a long time. She is healthy and her medical history is unremarkable. Tooth 14 has been endodontically restored for a long time and had no prosthetic restoration. The patient presented for a new restoration after a fracture of the old build-up filling (Fig. 2a). We took a radiograph (Fig. 2b) and discussed the treatment options of a core build-up and a bridge restoration. The two root canals were prepared with the Tokudrill up to the first mark (Fig. 2c) and then the length was checked with the Verifier.

Subsequently, the quartz fibre posts were inserted on a trial basis (Fig. 2d and 2e). The Universal Bond II (A/B) was mixed and applied to the pins as well as into the canals and blown (Fig. 2f). The Universal Paste was applied to the canals (Fig. 2g) and the posts were inserted into the canals (Fig. 2h).

The excess was removed and then light-cured. Finally, the die was built up with a dual-curing composite and the tooth and prepared (Fig. 2i to 2l). The bridge restoration will be done shortly.









#### Case 3: Cementation crown

This patient is 45 years old. Tooth 45 had already been treated endodontically some time ago. In the course of this clinical trial, it has now been restored with a crown in one-singlevisit chairside. The crown is made of a zirconium oxide-reinforced lithium silicate ceramic (centra dou). After the tooth was prepared (Fig. 3a), the crown was fitted. First, the crown and the stump were cleaned with alcohol and dried, the Universal Bond II (A/B)was mixed and applied to the crown as well as the stump and blown (figs. 3b and 3c). The Universal Paste was applied to the crown and used on the die (Fig. 3d).

The excess (Fig. 3e) was removed after a 3 sec. light cure. The crown was then cured again from all sides for 30 seconds each. The result after such a short treatment period is very satisfactory for the patient (Fig. 3f).









These products were used:



### **UNIVERSAL BOND II**



### **ESTECEM II Plus**



### **ESTELITE** Asteria



### **ESTELITE** Color



**Case 4: Repair of veneer 13, 12** The patient is 65 years old and presented to our practice because the veneer on the crowns regio 12,13 had chipped off (Fig. 4a). First, Universal Bond II (A/B) was mixed (Figs. 4b and 4c), applied to the crowns and air-blown.

Then Estelite Color medium chroma opaque was applied to the non-precious metal framework, followed by restoration of the veneer with Estelite Asteria A2B and finally polishing.

Even such indications, which are very unattractive for our patients from an aesthetic point of view, can be easily solved in a very short time and to the complete satisfaction of the practitioner and patient (Fig. 4d) with the universal adhesive system Universal Bond II from Tokuyama and the other, optimally matched product range from Tokuyama Dental.



# IMPRESSION

### One system – all possibilities

Despite the rapid development of digital impression systems, traditional impression taking still has its justification and is used in a large number of practices.

ESTESIL H₂TOP™ has various base materials and correction compounds to suit all impression techniques. Based on the type of prosthesis to be fabricated, the practitioner will prepare the tooth accordingly.



### **Keyfacts Impression materials**

- > Detailed impressions even under difficult conditions
- > High resistance with simultaneous dimensional stability
- > The right material for every impression technique





The impression material to be chosen determines the optimal impression technique for the respective application. No matter which restoration or which technique is to be used: ESTESIL  $H_2TOP^{TM}$  offers you all possibilities!

By combining with other technologies from TOKUYAMA, a vinyl polysiloxane has been created that has an extremely wettable surface due to the addition of surface-active, hydrophilic fillers.

The precise reproduction of detail enables the practitioner to achieve an TOP result. It is the reproduction of details beyond the visible range that makes the difference.





Tokuyama Estesil is an excellent impression material for daily use"

Dr. Andrea Fabianelli, Siena (ITA)



# ESTESIL H2TOPTM

A-silicone for highest demands and accuracy



#### All techniques

The right impression material at hand for every situation – numerous combination possibilities.

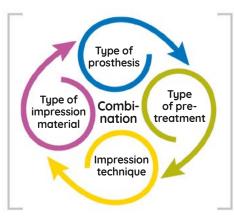
#### Surface active

A special platinum catalyst ensures excellent surface wettability. Strong even in humid environments.

#### **Tear-resistant**

Even with hard-to-remove impressions, the details are preserved.







More at >> www.tokuyama-dental.eu



# ESTESIL H₂TOP™ FAST

True-to-detail impression without a long wait – the fast way to the goal



#### Fast

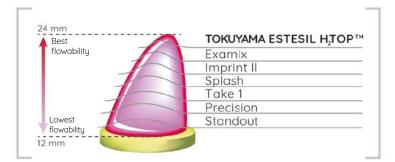
The faster setting reaction ensures speedy work without long waiting times.

#### Visibility

Colour-coordinated base and correction compounds ensure optimum visibility of the details.

#### Resilience

Excellent resilience ensures that the impression is and remains dimensionally stable.









# DESENSITISER

The **double block** – a protective shield for hypersensitive dentin.

### Sealing the tubules with SHIELD FORCE PLUS



Dentin hypersensitivity is a pain that has been known for a very long time and is one of the most common types of pain in the dental practice. Studies show that about 15~20% of all patients suffer from dentin hypersensitivity.

This pain is triggered by fluid movements of the dentin liquor in the open tubules, which irritate the underlying nerve.

In particular, the increasing wear of the teeth through e.g. abrasion or erosion exposes the dentinal tubules. A reliable desensitiser can provide relief here.





# SHIELD FORCE PLUS



#### Fast pain relief

The reaction of the 3D-SR-Monomer provides relief in seconds. Block 1 - Closure of the tubules.

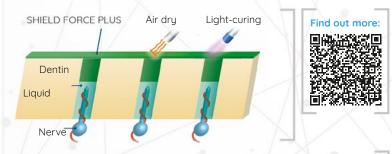
#### Permanent pain relief

The resulting protective layer on the tooth surface is light-cured. Block 2 - Sealing and permanent protection for up to 3 years.

#### Handling

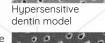
Extremely easy to use. No rinsing or massaging. Simply apply, leave on for 10 seconds, air blow and light cure. Done!





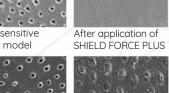
Thermal cycle test (10,000 cycles) at 4°C-60°C \*\*

The sealing layer of SHIELD FORCE PLUS remains intact after the thermal cycle test.



Sealing layer of the Gluma\* Desensitizer (Kulzer) washes out during the thermal cycle test.

> Hypersensitive dentin model



After the application of After thermal Gluma<sup>\*</sup> Desensitizer

cycle test

After the thermal

cycle test (10,000 x)

Not an own trademark of TOKUYAMA Dental Corp. Source: TOKUYAMA DENTAL R&D

### **Keyfacts Desensitiser**

- > Quick and easy handling
- > Excellent sealing effect
- > Durable & resistant protective coating



# RELINING

Denture relining material for long-lasting wearing comfort with maximum reliability



Over the years, dentures can lose their hold and the once good fit. The conditions of the jaw or the oral cavity change.

TOKUYAMA DENTAL relining materials promise a quick remedy here, without requiring a great deal of effort. The materials are suitable for both the dentist and the dental technician.

Different Shore hardnesses ensure that the appropriate material is available for every treatment case. Hard relining materials provide the usual support, while soft relining materials provide comfort when the prosthesis is pressing or pain needs to be relieved. No matter what level of support is required, both materials promise a long-term restoration.



## REBASE II FAST

The classic – tried and tested for years and recognised for hard relinings.



#### Time and cost saving

The material can also be used chairside. No waiting time for the patient, no laboratory costs for the dentist.

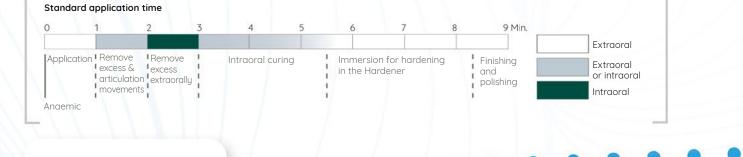
#### Pleasant

Low temperature development, no unpleasant taste or smell and MMA-free.

#### Permanent

A special hardener removes the top oxygen inhibition layer and thus causes complete curing. No breeding ground for bacteria or bad odours – for long-lasting use.







### **Keyfacts relining**

- > Can be used chairside or in the laboratory
- > Hard or soft relining
- > Long durability and reliability



# SOFRELINER TOUGH M

Permanent soft relining – long-lasting wearing comfort for up to 2 years.



#### Time and cost saving

The material can also be used chairside. No waiting time for the patient, no laboratory costs for the dentist.

#### Permanent

No peeling or tearing of the relining – permanent hold. Likewise lasting comfort without any loss of material stability.

#### Safe mouthfeel

Smooth surface offers little surface for plaque – no bad odours.





SOFRELINER TOUGH S

Comparison product







customers also bought this additional product: Dispenser II for SOFRELINER

More at >> www.tokuyama-dental.eu



# SOFRELINER TOUGH S

When even more wearing comfort is needed – the extra-soft version.

2015

2016

2018

2019

2017



#### Extra-soft

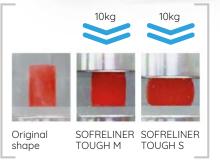
Excellent for interim care (max. 1 year), e.g. for wound healing after operations.

#### Excellent

Awarded several times by Dental Advisor as the best soft relining material.

#### Stable

High resistance to discolouration or wear.







Customers also bought this additional product: SILICONE REMOVER

More at >> www.tokuyama-dental.eu



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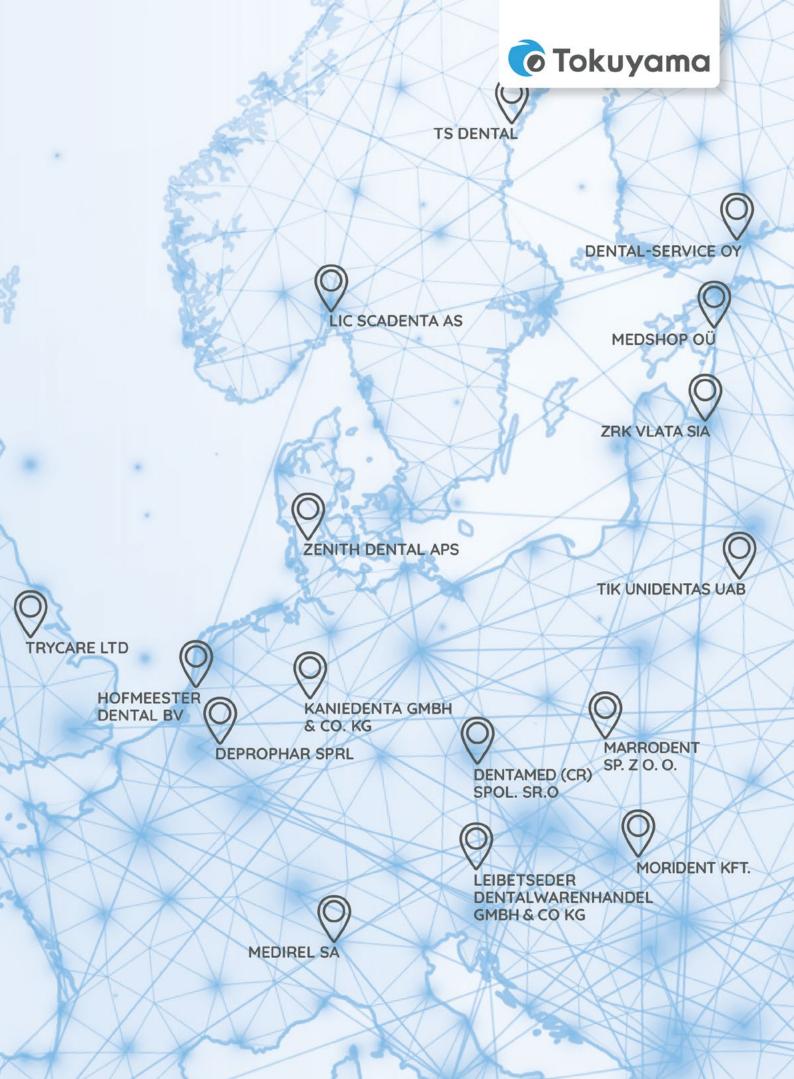


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