

# Continually Fluoride Releasing Aesthetic Dental Restorative Material





# **RESEARCH IS OUR BEST PRODUCT**



We are committed to keep high quality standards and to do everything necessary to meet this goal within the company.

At the same time, our company's philosophy is:

"Research is our best Product".

Our company's slogan:

"SHOFU Quality with every turn!"

means permanent conformity and improvement of our customer related activities.

Wolfgang van Hall Managing Director

# BEAUTIFIL II

# More than just filling

BEAUTIFIL II stands out for its aesthetic appearance with excellent color harmonisation, exceptional handling properties and its anti-plaque effect. The patented filler technology integrates the light transmission and diffusion properties of natural teeth. This enables naturally appearing restorations with even one layer.

BEAUTIFIL II has the ability to continually release fluoride and offers patients effective protection against secondary caries. This property can be further enhanced to a double fluoride release with SHOFU's FL-BOND II, a 2-step self-etching, fluoride releasing bonding system.

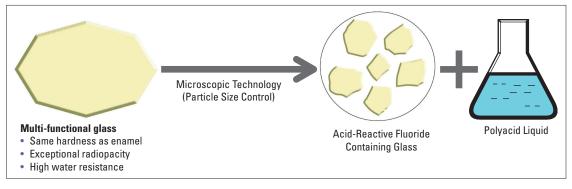
The hardness of the glass filler used as raw material of BEAUTIFIL  ${\rm I\!I}$  is similar to that of enamel and is antagonist-friendly. The material is therefore suitable for both anterior and posterior teeth.

In addition, BEAUTIFIL Flow and BEAUTIFIL OPAQUER are flowable and masking variations for an expanded field of application.

#### **GIOMER**

As a GIOMER, BEAUTIFIL II is based on the PRG (Pre-Reacted Glass-ionomer) technology. The inorganic filler consists of pre-reacted micro-glass particles. By integrating the reaction into the manufacturing process, a stable glass-ionomer phase is formed on the surface of the glass particles. Any further reaction in the oral environment (water absorption) is excluded. The S-PRG fillers (Surface Pre-Reacted Glass-ionomer) give the composite specific features, such as the recharge and release of fluoride or the anti-plaque effect, without impairing its physical parameters.

#### **Production process**



# Special features of S-PRG technology

- Fluoride release and recharge
- Aesthetics close to natural teeth
- Anti-plaque effect
- · High level of radiopacity
- · Long term clinical stability
- Resistance to wear of posterior teeth

# Reaction on the surface Nano particles 10-20 nm Glass particle Phase of glass-ionomer S-PRG Filler S-PRG filler Resin PAG Technology BEAUTIFIL II

# RELEASE AND RECHARGE OF FLUORIDE

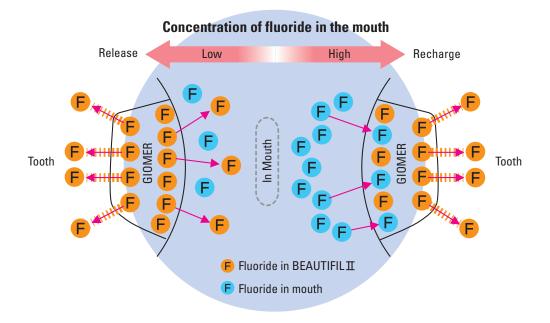
The S-PRG fillers contained in BEAUTIFIL II have the ability to release and recharge with fluoride depending on the fluoride concentration in the mouth. The strength and stability of the composite remain unaffected.

The release of fluoride takes place exactly where the effect can best develop. This means that the adjacent contact areas of the natural hard tooth structure are effectively protected from caries due to permanent local remineralisation.

BEAUTIFIL  ${\rm I\!I}$  recharges with fluoride ions via external sources such as fluoride rinses, professional treatment or toothpastes.

This property and effect was clinically proven in an 8-year study.1

The use of the coordinated bonding agent FL-BOND  $\rm II$  enhances the release of fluoride and improves the protection against caries.

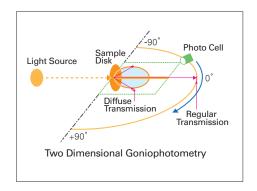


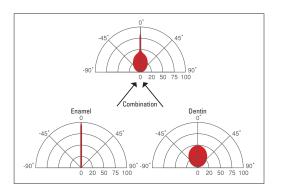
Process of fluoride release and recharge in the mouth

## CHARACTERISTIC FEATURES

#### **Conducts light naturally**

BEAUTIFIL II can recreate the effects of light transmission and diffusion of natural teeth due to its unique filler technology. Thanks to the perfect adaption you will achieve invisible restorations with the optical features of natural teeth.





#### **Color stability**

The shade of BEAUTIFIL II negligibly differs during modelling as well as before and after curing.

This ensures the right color match even while layering.



Core before curing and outer ring after curing

#### **Recommended use of colors**

BEAUTIFIL II comes in 12 different colors.

The universal colors - A1, A2, A3, A3.5, A4, B1, B2 and C2 - have been specially designed for a rational layering technique.

In addition, the opacious dentin colors – A20 and A30 – are particularly suitable for multi-color layering.

The enamel shade - Inc - offers highest translucency for aesthetically demanding anterior tooth restorations.

For the treatment of bleached teeth, use the Bleaching White shade  $-\,BW.$ 

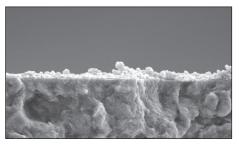
The indicators of the shade guides are made of genuine BEAUTIFIL II composite. They simulate the thickness of natural teeth to simplify the determination of the shade.



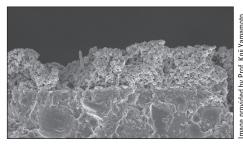
#### **Anti-plaque effect**

By the interaction between the components of saliva and the elements from S-PRG fillers in BEAUTIFIL  $\rm II$ , a material film is formed on the area restored with BEAUTIFIL  $\rm II$ . The material film that is continuously regenerated repeatedly minimizes the plaque adhesion and thus the colonization of bacteria.

Even if this film is removed, for example by teeth cleaning, subsequent protective layers are produced by the saliva.



BEAUTIFIL  ${\rm I\hspace{-.1em}I}$  (with S-PRG filler) sporadic plaque formation



Conventional composite resin (without S-PRG filler) proliferated plague formation

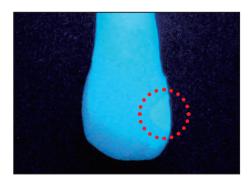
# **Optimum polishability**

Due to the average particle size of 0.8  $\mu m$  and the integration of nanofillers (10-20 nm), BEAUTIFIL II is quick and easy to polish. The homogenous surface supports the anti-plaque effect.



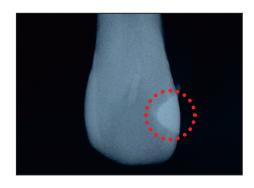
#### **Fluorescence**

The fluorescence of BEAUTIFIL II is similar to that of natural teeth.
The impact of visual influences such as UV light is minimized.



# Extraordinary radiopacity

The radiopacity is 1.7 times higher than enamel and 3 times higher than dentin and permits reliable visual X-ray diagnostics.



#### **Outstanding handling properties**

BEAUTIFIL II is easy to form and can easily be attached to the prepared hard tooth structure. The viscosity of the material, which is only slightly dependent on temperature, ensures stable modelling properties without sticking to the instruments.

The "one touch cap" of the syringe has been enhanced for easy dispensing and accurate application.



# Reliable strength and durability

The homogenous microstructure of BEAUTIFIL II, with its high filler loading, ensures excellent physical properties with long-term stability and a high degree of flexural strength. These outstanding material properties have been clinically proven and documented in an 8-year study. 1

# **Physical properties**

Compressive strength	Flexural strength	Vickers Hardness	Wear resistance	Filler loading	Average filler size	Depth of cure	Radiopacity	Fluoride release & recharge
330 MPa	130 MPa	62 HV	0.52 weight %	83.3 weight %	0.8 μm	5.9 mm	3.4 Al:mm	yes
							OLOR .	Cr.

(In-house data: SHOFU Inc., R&D Dept.)



Gordan V.V., Mondragon E., Watson R.E., Garvan C., Mjör I. A.: A clinical evaluation of a self-etching primer and a giomer restorative material. Result at eight years.

J Am Dent Assoc 138: 621-627 (2007)

#### **Confidence starts here**

#### **Before restoration**



#### After restoration











Images kindly provided by Dr. Sushil Koirala

#### **Indications**

Direct restorations that demand highest aesthetics and biocompatibility such as:

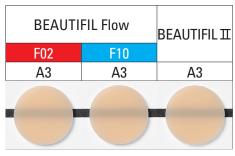
- Restorations of Class III, IV and V cavities
- Restorations of Class I cavities and selectively of Class II cavities
- Restoration of cervical erosion and root caries
- Repair of fractured incisal edges
- Veneers and posts
- Direct cosmetic repairs

## SYSTEM COMPONENTS

#### BEAUTIFIL Flow - BEAUTIFIL OPAQUER - FL-BOND II

The flowable versions **BEAUTIFIL Flow** increase the range of indications. The moderately viscous F02 and the smooth-flowing F10 are coordinated to match the colors of BEAUTIFIL II precisely.

Our **BEAUTIFIL OPAQUER** is available in two colors for masking discolorations, even with very thin film layers.

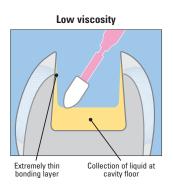


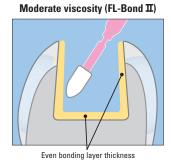
Shade coordination of BEAUTIFIL II and BEAUTIFIL Flow



The self-etching, two-step bonding system FL-BOND  $\rm II$  also contains fluoride releasing S-PRG fillers and, in combination with BEAUTIFIL  $\rm II$ , enhances the release of fluoride. FL-BOND  $\rm II$  Primer is free of HEMA and acetone. FL-BOND  $\rm II$  Bonding Agent is radiopaque and, thanks to its flowable consistency, easy to apply.







## ORDER INFORMATION







#### **OneGloss Set**

One step finishing and polishing system of silicone polishers for composite restorations.

PN 0180

#### BEAUTIFIL II 6 Color Set

- 6 BEAUTIFIL II syringes
   (A2, A3, A3.5, B2, A30, Inc), 4.5 g each
- 1 Dura-White Stone (FL2)
- 1 Super-Snap Single Kit
- 1 OneGloss Trial Set
- Paper pad

PN 1775

PN 1776 Tips (6x 20 Tips at 0.25 g each)

#### **BEAUTIFIL II Cosmetic Kit**

- 3 BEAUTIFIL II syringes (A2, A3, Inc), 4.5 g each
- 1 syringe BEAUTIFIL Flow F 02 (A2), 2 g
- 1 syringe BEAUTIFIL OPAQUER (LO), 2 g
- 1 Dura-White Stone (FL2)
- 1 Super-Snap Single Kit
- 1 OneGloss Trial Set
- 2x 5 pcs syringe tips
- Paper pad

**PN 1777** 

#### BEAUTIFIL II Tips 3 Color Set

- 30 BEAUTIFIL II Tips (10x 0.25 g A2, A3, B2 each)
- OneGloss (Cup, Midi, IC, 1 each)
- 1 OneGloss Mandrel CA

PN 1778

# **BEAUTIFIL II Syringes** 4.5 g each **BEAUTIFIL II Tips** 20 pcs, 0.25 g each

	DN				
Shade	PN				
Silauc	Syringes	Tips			
A1	1401	1752			
A2	1402	1753			
A3	1403	1754			
A3.5	1404	1755			
A4	1405	1756			
B1	1408	1759			
B2	1409	1760			
C2	1412	1763			
Inc (Incisal)	1415	1766			
BW (Bleaching White)	1416	1767			
A20 (opacious A2)	1419	1770			
A30 (opacious A3)	1420	1771			



