

DUAL CURING BULK COMPOSITE

# Fill-Up!™

Deep. Fast. Perfect.

 **COLTENE**  
[www.coltene.com](http://www.coltene.com)

## ● Deep

- Dual-cure
- Self-curing, independent of layer thickness
- Cures even with very deep cavities

## ● Fast

- Immediate fabrication of the filling is possible, as Fill-Up! is light-cured for just 5 s
- No top layer necessary, thanks to outstanding mechanical properties
- Universal shade (VITA™ A2–A3) provides excellent self-blend properties
- Fast and simple automix application

## ● Perfect

- Minimal shrinkage stress
- Optimal marginal sealing with the matched ParaBond bonding agent
- Easy to polish to a high luster
- Attractive aesthetics under all lighting conditions thanks to fluorescence
- Contains zinc oxide

# Point for point a direct hit

## **Varied applicability:**

This medium-viscosity, dual curing bulk composite has been developed for those indications that demand fast, aesthetic and tooth-colored restoration.

Fill-Up!™ is suitable for bulk fill technique in the posterior region and can be applied in a single layer of any depth. Surface light curing for only 5 s can finish the restoration with no top layer needed.

Fill-Up!™ is indicated for:

- Class I and II cavities
- Cavity lining
- Core build-ups

## **A shade for every case:**

Thanks to its chameleon effect, the universal shade between the levels VITA™ A2-A3 adapts perfectly to every situation and saves time on shade management.

In perfect interaction with ParaBond - the bonding agent for an optimized marginal seal - it presents a well-rounded system for all everyday restorative situations in the dental practice.

# Hole in One

Only one step away from a perfect result

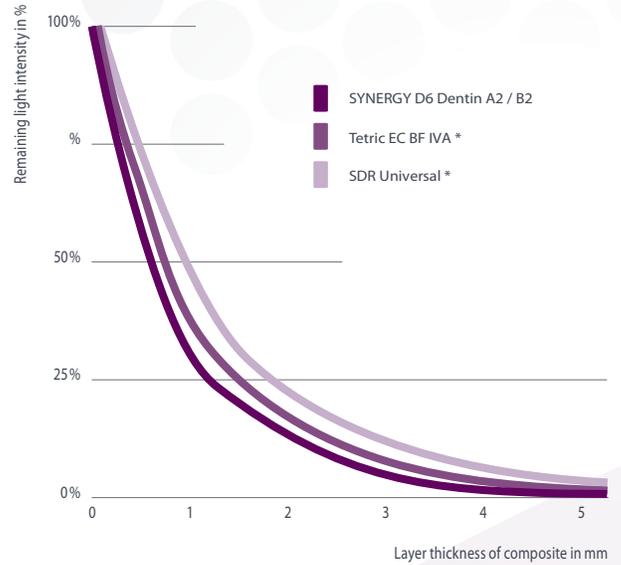


# Deep uniform curing

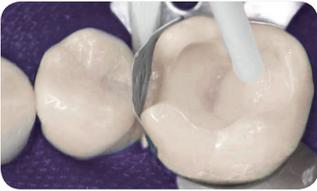
No matter what layer thickness is applied, there is no need to worry about thorough curing, as Fill-Up!™ consists of both light and chemically curing properties.

Other light curing bulk fill materials can be applied in layers of max. 4-5 mm. Light intensity measurements demonstrate that above a layer thickness of just 1 mm, light penetration drops drastically. Reliable deep polymerization is therefore not always guaranteed, which can lead to postoperative sensitivities.

Light absorption by composites<sup>1</sup>



## For fast results you can always be proud of



Apply in a single step



Light cure for 5 s or wait for the chemical setting



Adapt and polish the filling



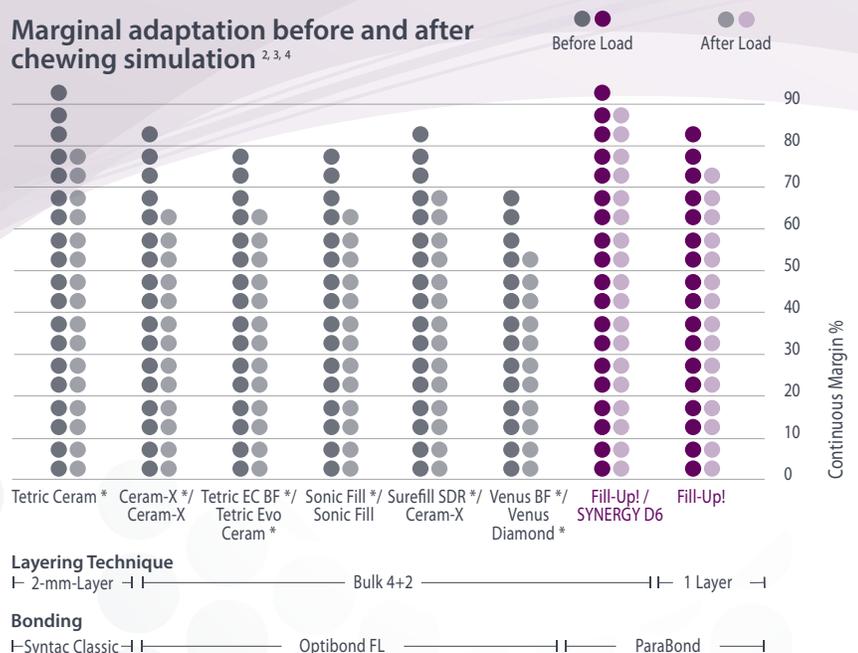
Final result

## Two that work together perfectly

Fill-Up!™ and ParaBond adhesive system are perfectly matched. ParaBond accelerates polymerization at the cavity margins, which optimizes the marginal sealing of the filling. This specifically prevents the formation of marginal gaps and secondary caries.

Study results from the University of Geneva attest Fill-Up!™ has the best marginal sealing values before and after chewing simulation (thermo-mechanical cycling).

Marginal adaptation before and after chewing simulation<sup>2,3,4</sup>

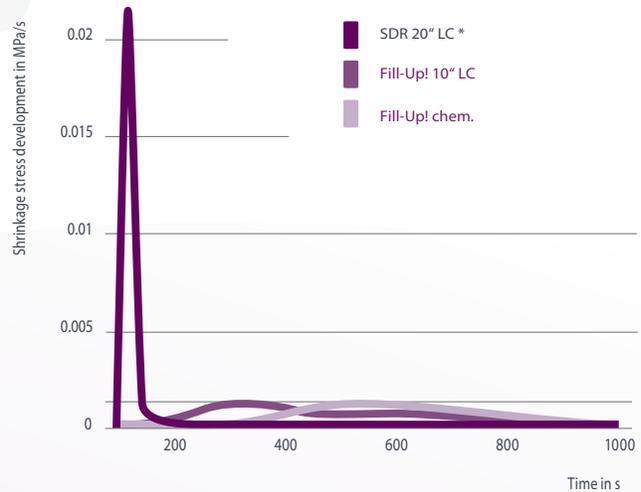


# Gentle and safe into depth

Large cavities that are filled with just one layer are subject to high shrinkage forces upon curing with light. However, the chemical curing proceeds much more gently (see graphic).

And if speed is of the essence, Fill-Up!™ can be light cured. The restoration can then be finished immediately, whereas deeper regions are chemically post-cured.

Shrinkage stress development at curing <sup>1</sup>

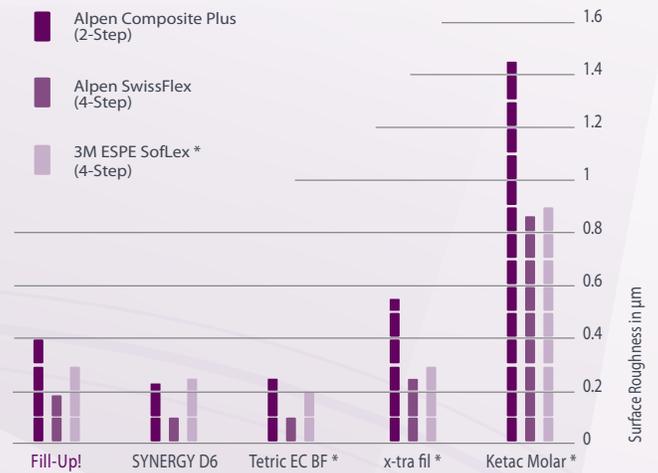


# Polishes to high gloss

Fill-Up!™ is effortlessly polished to a shine. Studies confirm the superb polishing results together with 2-Step Alpen Composite Plus Polishers and 4-Step Alpen SwissFlex Discs.

Fill-Up!™ displayed a very low surface roughness after polishing that is comparable with light-cured composites.

Surface Roughness after Polishing <sup>5</sup>



# Perfect details <sup>1</sup>

Flexural modulus..... 7.260 MPa  
 Flexural strength..... 109 MPa  
 Water sorption ..... 19 µg/mm<sup>3</sup>  
 Water solubility..... 0.7 µg/mm<sup>3</sup>  
 Radiopacity..... 2 mm Al  
 Vickers hardness..... 51 HV  
 Volumetric shrinkage (acc. to Watts) .. 3.3%

Compressive strength..... 289 MPa  
 Ø filler particle size ..... 2 µm  
 Filler content by weight ..... 65 %  
 Filler content by volume ..... 49 %  
 Density..... 1.8 g/cm<sup>3</sup>  
 Working time..... 1 min  
 Setting time (not incl. working time) ..... 2 min

**Composition:**

- Dental glass
- Amorphous silicic acid
- Methacrylates
- Zinc oxide



# Order information



## Fill-Up!™

Dual curing bulk composite

<b>6001 9341</b>	<b>Fill-Up!™ Refill</b>
1 × 4.5 g	Fill-Up!™ Universal
3 ×	Mixing Tip Short Super Fine
4 ×	Mixing Tip Short Fine
<b>6747</b>	<b>Mixing Tip Short Super Fine</b>
40 ×	Mixing Tip, ø 1 mm
<b>6759</b>	<b>Mixing Tip Short Fine</b>
40 ×	Mixing Tip, ø 1,8 mm

<b>6001 9342</b>	<b>Fill-Up!™ Intro Kit</b>
2 × 4.5 g	Fill-Up!™ Universal
1 × 2.5 ml	Etchant Gel S
2 × 3 ml	ParaBond Adhesive A & B
6 ×	Mixing Tip Short Super Fine
8 ×	Mixing Tip Short Fine

<b>6001 9355</b>	<b>Fill-Up!™ Economy Kit</b>
5 × 4.5 g	Fill-Up!™ Universal
15 ×	Mixing Tip Short Super Fine
20 ×	Mixing Tip Short Fine



## Etchant Gel S

Ultimate etchant gel

<b>7373</b>	<b>Etchant Gel S Kit</b>
2 × 2.5 ml	Syringes
20 ×	Application Needles
<b>7876</b>	<b>Application Needles</b>
20 ×	black



## ParaBond

Chemically curing adhesive system

<b>7493</b>	<b>ParaBond Adhesive A &amp; B Refill</b>
1 × 3 ml	ParaBond Adhesive A
1 × 3 ml	ParaBond Adhesive B



\* not a trademark of COLTENE

<sup>1</sup> Internal measurement

<sup>2</sup> Krejci et. al. 2014, Marginal adaptation of bulk filled dual cured composites, publication prepared for ADM meeting

<sup>3</sup> Krejci et. al. 2014, Marginal adaptation of class II cavities restored with bulk-fill composites, Journal of Dentistry

<sup>4</sup> Besek et. al., zahncfarbene adhäsive Füllungen, PPK Zürich 2004

<sup>5</sup> Dr. Flury, University of Bern, data on file

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