

# Tetric<sup>®</sup>

The composite

Prime  
Handling



## The solution for all cavities

Efficient  
Esthetics

ivoclar  
vivadent<sup>®</sup>  
passion vision innovation

# The solution for all cavities

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Stripping back to the essentials has never felt better. The four latest composites of the proven Tetric product family offer increased efficiency and enhanced treatment results compared with the predecessor materials.

**Tetric® Prime** is a sculptable universal composite and **Tetric EvoFlow®** is a flowable universal composite, both for anterior and posterior restorations.

**Tetric® PowerFill** is a sculptable and **Tetric® PowerFlow** a flowable posterior 4-mm composite with light-curing times starting from 3 seconds<sup>[1-4]</sup>.

chameleon effect ensures  
**a natural shade blend**

**true-to-nature esthetics**  
for posterior restorations

**time savings** of  
up to **51%**<sup>[5]</sup>

**one kit** for  
all cavities

**superior handling**<sup>\*</sup>  
in daily use

More than

# 500

**million restorations placed worldwide\*\***

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# Prime Handling

creamy consistency

good adaptability

easy contouring

glossy surface

easy application

good brushability



# Chameleon effect ensures a natural shade blend

If you want to replace lost tooth structure with a natural-looking esthetic restoration, you will require materials designed to mimic the light optical properties of the natural enamel and dentin as closely as possible.

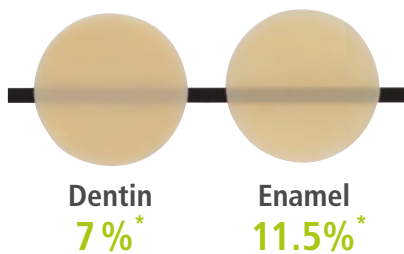
### Universal enamel shades for small defects

In most cases, you will need to apply only one shade-matched material to achieve a lifelike esthetic result.

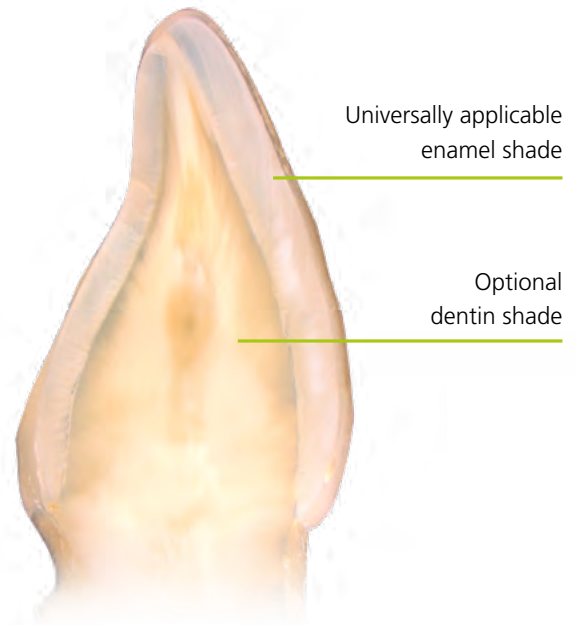
### Additional dentin shades for large defects

Both Tetric Prime and Tetric EvoFlow offer various dentin shades with a low translucency to restore large defects or cavities with heavily stained dentin surfaces.

### Translucency levels of the Tetric® Prime shades



\* Example values  
R&D Ivoclar Vivadent, Liechtenstein, 2019



Source: R&D Ivoclar Vivadent, Liechtenstein

## Anterior restoration made of Tetric EvoFlow® A2 Dentin and Tetric® Prime A2

Source: Dr Carola Pentelescu, Ivoclar Vivadent, Liechtenstein



Starting situation: Insufficient mesio-palatal composite filling on tooth 12



Final situation



#### **Exceptional chameleon effect**

The special monomer and filler mixture is responsible for the exceptional chameleon effect. This effect ensures a natural shade blend with the surrounding dentition.

The refractive index of the monomer matrix matches that of the fillers - in this case, of the glass rod. It appears nearly invisible.

## **Posterior restoration** made of Tetric EvoFlow® A2 Dentin and Tetric® Prime A2

Source: Dr Carola Pentelescu, Ivoclar Vivadent, Liechtenstein



Starting situation: Insufficient disto-occlusal composite filling on tooth 34



Final result

# True-to-nature esthetics for posterior restorations

The 4-mm composites Tetric PowerFill and Tetric PowerFlow allow you to achieve the same esthetic results in the posterior region as with conventional composites<sup>[6]</sup>.



The highly reactive, patented light initiator **Ivocerin®** helped pave the way for the development of the esthetic materials Tetric PowerFill and Tetric PowerFlow<sup>[7, 8]</sup>.

Conventional composites designed for the placement of large increments are often very translucent. Ivocerin-containing composites offer enamel-like and dentin-like translucency levels and up to 4-mm increment placements whilst achieving a reliable depth of cure<sup>[4]</sup>.



The **Aessencio® technology** represents a milestone in the esthetic optimization of 4-mm composites. Initially, the composite material features a high translucency to be able to cure to the desired depth of cure. Whilst polymerizing, it gradually changes to a more opaque shade. Tetric PowerFlow, for example, obtains the final dentin-like translucency of below 10%. This allows stained tooth structure to be concealed effectively.



The in-vitro test<sup>[9]</sup> demonstrates the effect of the Aessencio technology:  
The black lines under the Tetric PowerFlow sample are clearly visible before light-curing.  
After curing, they are completely masked due to the change in translucency:



Tetric PowerFlow before and after polymerization

#### **Well-matched materials:**

The different consistencies and shades are uniquely formulated to be used in any combination. Very lifelike posterior restorations are possible, for example, when Tetric PowerFlow and Tetric Prime are combined.



# The same performance<sup>[4, 10, 11, 12]</sup> in thicker layers\*

Tetric PowerFill and PowerFlow can be used in layers of up to 4 mm. Therefore, fewer layers are needed in comparison with conventional placement techniques. This helps to streamline the treatment protocol<sup>[1, 2, 3]</sup>.

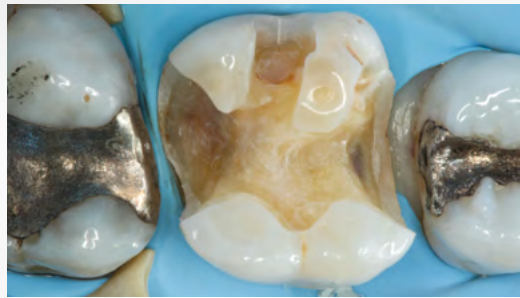
**low susceptibility** to process-related air entrapments<sup>[13, 14]</sup>

**reliable depth of cure** in increments up to 4 mm<sup>[1, 2, 3, 9]</sup>

**high performance**, same as conventional composites<sup>[4, 10, 11, 12]</sup>



Preoperative situation



Prepared cavity



Baseline  
Source: Dr Lukas Eggist, Ivoclar Vivadent, Liechtenstein



6-month recall

\* in comparison to conventional composites



# Reliable depth of cure in short exposure times<sup>[4]</sup>

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Light polymerization is considered to be the most common source of error in direct restorative treatments<sup>[15, 16]</sup>. An efficient polymerization protocol featuring the shortest possible light exposure time heightens the reliability of the curing step and therefore enhances the quality of the final restoration<sup>[1]</sup>.

The light intensity produced by the curing device has a decisive effect on the length of time required to polymerize a composite. State-of-the-art curing lights can produce light intensities of up to 3,000 mW/cm<sup>2</sup>. They allow exposure times to be reduced to be as short as 3 seconds in some cases. Should the curing light be accidentally shifted during the curing procedure, the intelligent curing assistant of the Bluephase® PowerCure will send out an alert.

In addition, all the shades of the Tetric family of products can be cured with the same exposure times.



Light intensity (mW/cm <sup>2</sup> )	Curing time	
500 – 900	20 s	
900 – 1,400	10 s	e.g. Bluephase® G4
1,800 – 2,200	5 s	
2,700 – 3,300	3 s	e.g. Bluephase® PowerCure

# Excellent handling properties to suit every situation

Four different composite materials are all you need to meet the clinical requirements of every direct restorative procedure. And they even offer you flexibility to exercise your personal preferences in your restorative treatments.

Prime  
Handling



## Sculptable handling and low stickiness

Due to its creamy consistency, **Tetric® Prime** can be used with ease to restore anterior and posterior teeth. The low stickiness of **Tetric® Prime** and **Tetric® PowerFill** facilitates the creation of anatomical structures<sup>[17, 18]</sup>. Modelling instruments such as **OptraSculpt®** and **OptraSculpt Pad®** are ideal for this task.




## Flowable when desired

While **Tetric EvoFlow®** is flowable under pressure, it remains in place when no pressure is exerted. Due to its thixotropic properties, **Tetric EvoFlow®** can be applied exactly where it is needed, making it suitable for use as a liner as well as a desired choice for small defects or anterior restorations.



## Self-levelling consistency

**Tetric® PowerFlow** ensures excellent adaptation to cavity walls. It is ideally suited to fill large cavities in the posterior region.



// Tetric Prime has a creamy consistency, yet it is stable and very easy to adapt. I'm looking forward to using it in my practice. //

**Dr med. dent. Manuela Brajković-Deković**  
Dental Clinic Poreč, Croatia



## Time-tested quality and durability

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The Tetric range of products combines proven product features with state-of-the-art technology. The first protagonist of this range, Tetric EvoCeram<sup>®</sup>, has been successfully used in clinical applications for over ten years.

**high radiopacity**  
of up to 400 % Al

**low shrinkage stress**  
of e.g. 2.1 % in the case of Tetric PowerFill<sup>[4,9]</sup>

**long processing times<sup>[9]</sup>**  
of more than 3 minutes\*

**optimum flexural strength<sup>[1,4]</sup>**  
e.g. Tetric PowerFill: 119 MPa\*\*

\* according to ISO 4049

\*\* batch W92823; measured by Ivoclar Vivadent

# One kit for all cavities

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The Tetric Line kit comprises all 4 composite materials in the most popular shades for everyday restorative applications. With Tetric Prime, Tetric PowerFill and Tetric PowerFlow, the kit features the latest developments of the Tetric family, enabling a streamlined application protocol and excellent handling.

**Tetric® Prime**

shades A2, A2 Dentin and A3 are included in the kit

**Tetric EvoFlow®**

shade A3 is included in the kit

**Tetric® PowerFill**

shade <sup>1</sup>A is included in the kit

**Tetric® PowerFlow**

shade <sup>1</sup>A is included in the kit



Example of a  
Tetric Line Kit

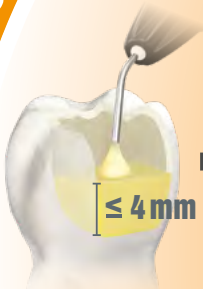
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3s  
POWER  
CURE

Class I and II

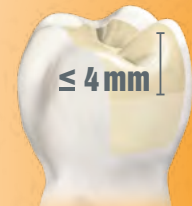


Tetric® PowerFill  
IV A



Tetric® PowerFlow  
IV A

+



Tetric® PowerFill  
IV A

Tetric®

Class III and IV



Tetric® Prime  
A2/A3



Tetric EvoFlow®  
A3



Tetric® Prime  
A2 Dentin



Tetric® Prime  
A2



Tetric® Prime  
A2/A3



Tetric EvoFlow®  
A3

Prime  
Handling\*

Class V

\*Tetric Prime offers excellent handling.

# Experience the difference with **3s PowerCure**

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When direct Class I and II restorations are placed in permanent posterior teeth, 3-second exposures from the occlusal aspect are sufficient for all curing steps with the Bluephase PowerCure in the 3sCure mode. Simply expose Adhese Universal, Tetric PowerFill and Tetric PowerFlow to the light-intensity of 3,000 mW/cm<sup>2</sup> produced by the curing light<sup>[1]</sup>. You will notice right away that the curing time you require is considerably reduced. At the same time, you will continue to achieve the customary high-quality esthetic results.

// There is no way around the polymerization of composite materials. A 3-second cure comes in exceptionally handy here. //

**Dr Nathaniel Lawson**  
Assistant Professor and Division Director of Biomaterials  
UAB School of Dentistry, Birmingham, USA





## Save up to 51% on time in the posterior region<sup>[5]</sup>

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Maximize the efficiency of your workflow with Tetric PowerFill and Tetric PowerFlow<sup>[5, 6, 17, 19]</sup>. You will need fewer increments, which means having to switch less between the composite, the modelling instrument and the light-curing device – whilst achieving the same treatment results compared with conventional layering techniques.

The 3s PowerCure product system enables you to increase the efficiency of your workflow even further by offering 3-second exposure times compared with the placement of conventional 4-mm composites.

**Fewer steps thanks to 4-mm increments:**



# Efficient esthetics – even better together

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The efficiency of the treatment procedure can be enhanced by combining the Tetric line with other state-of-the-art products from Ivoclar Vivadent: The OptraGate lip and cheek retractor and the Adhese Universal bonding agent, for example, help to increase the efficiency of your restorative filling procedures <sup>[6, 19, 20]</sup>.

// Fast-curing materials such as Tetric PowerFill and Tetric PowerFlow, which can be applied in layers of up to 4 mm, enable us to improve the patient experience in our dental practice. Simultaneously, we can optimize chairside time, as the dental bonding and layering procedure in the posterior area is less time consuming. //

**Dr Nicola Ragazzini**  
Bologna, Italy







## 1 Isolate

Effective isolation with **OptraGate**®, cotton rolls and saliva ejector



## 2 Bond

Direct intraoral application of **Adhese**® **Universal** with the efficient VivaPen®



## Restore

**Tetric**® – The solution for all cavity classes

# 3



## 4 Contour

Time-saving contouring with **OptraSculpt**® due to its anti-stick effect



## 5 Cure

Reliable and fast curing with the **Bluephase**® curing units



## 6 Polish

High-gloss polishing in only one step **OptraGloss**®

## Efficient Esthetics

Products that are optimally coordinated for direct restorative procedures enhance the efficiency with which high-quality esthetic restorations can be achieved.

# Tetric<sup>®</sup> CAD – the esthetic composite block

Tetric CAD is an esthetic composite block for the efficient fabrication of indirect single-tooth restorations by means of the CAD/CAM technique. Due to the material's excellent chameleon effect, Tetric CAD restorations blend seamlessly with the remaining natural tooth structure.

Tetric CAD ideally complements the Tetric line range of conventionally layered composite resins for inlays, onlays, veneers and crowns. Immediately after grinding, the restorations are polished and then seated using an adhesive cementation protocol. This processing technique is very efficient and allows esthetic results to be achieved quickly and easily.

The blocks are available in two translucency levels: MT (Medium Translucency, recommended for laminate veneers and crowns), which is available in five shades, and HT (High Translucency, recommended for inlays and onlays), which is available in 4 shades. While the small size I12 block is suitable for inlays, the large block C14 provides sufficient material for a crown.



// Tetric CAD is fast and easy to process.  
After the restoration has been ground,  
it can be polished to a high gloss in  
no time. //

**Dr Lukas Enggist**  
Ivoclar Vivadent, Schaan, Liechtenstein



## Application spectrum:

Tetric composites	Tetric CAD
Direct restorations	Indirect restorations
Class I – V	Inlays, onlays, veneers, crowns

### Source:

- [1] N. Ilie, *Study Report*, LMU Munich, 2019, N. Ilie, Presentation, LMU Munich, 2018
- [2] W. Palin, *Study Report*, Birmingham UK, 2015.
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- [5] A. Lebedenko, *Test Report*, Ivoclar Vivadent, 2018.
- [6] L. Enggist, *Test Report*, Ivoclar Vivadent, 2020
- [7] B. Ganster et al., *Rapid Commun.* 2008, 29, 57-62.
- [8] B. Ganster et al., *Macromolecules* 2008, 41, 2394-2400.
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- [11] T. Bock, *Test Report*, Ivoclar Vivadent, 2019.
- [12] U. Blunck, *Study Report*, Berlin, 2018.
- [13] R. Hirata, *Operative Dentistry*, 2018, 43-2, 144-150.
- [14] S. Heintze, *Test Report*, Ivoclar Vivadent, 2017.
- [15] S. E. Kopperud et al, *J Dent* 2017, 58, 67-73.
- [16] F. C. Calheiros et al, *J Biomed Mater Res B Appl Biomater* 2008, 84, 503-509.
- [17] N. Lawson, *Study Report*, Birmingham US, 2020.
- [18] L. Cooper, *Study Report*, Chicago, 2020.
- [19] N. Ragazzini, *Study Report*, Bologna, 2020.
- [20] K. Hufschmidt, *Study Report*, Wels, 2016.

# Delivery forms

## Tetric composites

### Tetric® Prime – The universal composite

<b>Refills</b>	available as 1 x 3-g syringes, 3 x 3-g syringes and 20 x 0.25-g Cavifills in the following shades: <b>Enamel shades (11,5% ):</b> A1, A2, A3, A3.5, A4, B1, B2, C2 <b>Dentin shades (7% ):</b> A2 Dentin, A3.5 Dentin <b>Highly translucent enamel shade (15% ):</b> T <b>Bleach shades:</b> Bleach L
<b>Shade guide</b>	<b>Tetric Prime shade guide</b>

### Tetric EvoFlow® – The universal flowable composite

<b>Refills</b>	available as 1 x 2-g syringe and 20 x 0.2-g Cavifills in the following shades: <b>Enamel shades (12% ):</b> A1, A2, A3, A3.5, A4, B1, B3 <b>Dentin shades (7% ):</b> A2 Dentin, A3.5 Dentin, B2 Dentin <b>Highly translucent enamel shade (23% ):</b> T <b>Bleach shades:</b> Bleach XL, Bleach L, Bleach M
<b>Shade guide</b>	<b>Tetric EvoFlow shade guide</b>

### Tetric® PowerFill – The sculptable 4-mm composite

<b>Bluephase PowerCure &amp; System Kit Syringe</b>	<b>1x Bluephase PowerCure 100–240V with system kit:</b> 1x 3-g syringe Tetric PowerFill <sup>1</sup> A, 1x 2-g syringe Tetric PowerFlow <sup>1</sup> A, 1x 2 ml Adhese Universal VivaPen
<b>Bluephase PowerCure &amp; System Kit mixed</b>	<b>1x Bluephase PowerCure 100–240V with system kit:</b> 20x 0.2 g Tetric PowerFill <sup>1</sup> A, 1x 2-g syringe Tetric PowerFlow <sup>1</sup> A, 1x 2 ml Adhese Universal VivaPen
<b>Tetric PowerFill System Kit Syringe</b>	1x 3-g syringe Tetric PowerFill <sup>1</sup> A, 1x 2-g syringe Tetric PowerFlow <sup>1</sup> A, 1x 2 ml Adhese Universal VivaPen
<b>Tetric PowerFill System Kit mixed</b>	20x 0.2 g Tetric PowerFill <sup>1</sup> A, 1x 2-g syringe Tetric PowerFlow <sup>1</sup> A, 1x 2 ml Adhese Universal VivaPen
<b>Refills</b>	available as 1 x 3-g syringes, 3 x 3-g syringes and 20 x 0.2-g Cavifills in the following shades: <b>Universal shades (15% ):</b> <sup>1</sup> VA, <sup>1</sup> VB <b>Bleach shades:</b> <sup>1</sup> WW
<b>Shade guide</b>	<b>Tetric PowerFill &amp; Tetric PowerFlow shade guide</b>

### Tetric® PowerFlow – The flowable 4-mm composite

<b>Refills</b>	available as 1 x 2-g syringes and 20 x 0.2-g Cavifills in the following shades: <b>Dentin shades (&lt; 10% ):</b> <sup>1</sup> VA, <sup>1</sup> VB <b>Bleach shades:</b> <sup>1</sup> WW
<b>Shade guide</b>	<b>Tetric PowerFill &amp; Tetric PowerFlow shade guide</b>

### Tetric Line – The solution for all cavities

<b>Tetric Line System Kit Syringe</b>	1 x Tetric PowerFill <sup>1</sup> A, 1 x Tetric PowerFlow <sup>1</sup> A, 1 x Tetric Prime A2, 1 x Tetric Prime A3, 1 x Tetric Prime A2 Dentin, 1 x Tetric EvoFlow A3, 1 x Adhese Universal VivaPen
<b>Tetric Line System Kit mixed</b>	10x Tetric PowerFill <sup>1</sup> A, 1 x 2-g syringe Tetric PowerFlow <sup>1</sup> A, 10x Tetric Prime A2, 10x Tetric Prime A3, 5x Tetric Prime A2 Dentin, 1 x 2-g syringe Tetric EvoFlow A3, 1 x Adhese Universal VivaPen

#### Accessories

**20 x 1.2-mm Tips black**  
Tetric PowerFlow



**20 x 0.9-mm Tips black**  
Tetric EvoFlow and  
IPS Empress Direct Opaque



<sup>1</sup> Translucency (sample values), Technical Data Sheet Ivoclar Vivadent

