

# The solution for all cavities



## The solution for all cavities

The Tetric Line is comprised of four coordinated composites for direct restorative treatment. It combines tried-and-tested quality with modern technology.

The Tetric line of products is based on Tetric EvoCeram, which has enjoyed more than 15 years of clinical success. To date, more than **700 million** restorations have been placed with Tetric throughout the world. Four composite materials are all you need for an efficient restorative workflow in all cavity classes. The products are available in a kit.



### True-to-nature esthetics

The products of the Tetric Line produce outstanding esthetic results in both anterior and posterior teeth. Tetric Prime and Tetric EvoFlow allow you to create beautiful natural-looking restorations in anterior teeth. The 4-mm composites Tetric PowerFill and Tetric PowerFlow provide true-to-nature esthetics in the posterior region.



### 700 million restorations[1]

The Tetric Line offers you tried-and-tested quality based on long-standing expertise. The composites are characterized by their easy handling, minimal susceptibility to fracture and excellent margin quality.<sup>[2]</sup>

Due to their high radiopacity, the materials are clearly visible on X-rays. [3,4]



### Time savings of up to 51%

All the different consistency and shade variants of the Tetric Line can be effectively combined. They are easy and efficient to handle and they require only short light exposure times. The 4-mm composites reduce the treatment time by up to 51%<sup>[5,6]</sup> when they are used as a part of the 3s PowerCure product system.

PowerCure impressively efficient Tetric Prime A2/A3 Tetric Tetric Prime A2 Line Tetric Prime Tetric EvoFlow Class V

<sup>\*</sup> Cavity classes I-V according to G. V. Black [1] based on worldwide sales figures for the Tetric product line.
[2] In combination with Adhese Universal. Blunck U, Marginal adaptation study, Study Report, Berlin, 2018.
[3] Gründeler L, Finished Device Specification (FDS), Test Report, Ivoclar Vivadent, 2020. [4] Gebhardt B, Verification report Tetric PowerFill, Test Report, Ivoclar Vivadent, 2017. [5] Relative to posterior restorations made with the 3s PowerCure product system. [6] Lebedenko A, Comparative fillings: Conventional layering technique versus 3sCure two-layer technique, Test Report, Ivoclar Vivadent, 2018.

## Tetric Prime for excellent handling

Tetric Prime is a sculptable universal composite for the anterior and posterior region.

Because of the material's distinctive chameleon effect and excellent handling properties, it is particularly suitable for rebuilding lost tooth structure in the highly visible anterior region. In most cases, you will need to apply only one shade-matched material to achieve a lifelike esthetic result.

## Esthetics - Quality - Efficiency

- ✓ Natural shade blend due to the distinctive chameleon effect
- ✓ Universally applicable enamel shades for small defects and direct veneers
- ✓ Dentin shades showing low translucency for restoring large defects and fulfilling high esthetic expectations
- ✓ Prime handling properties: Easy to contour as a result of low stickiness, good spreadability and creamy consistency
- ✓ Excellent polishability for a lustrous surface
- ✓ Easy to distinguish on X-rays due to high radiopacity

### How does natural shade blend work?

As a result of the special monomer and filler blend of our universal composites, the materials are capable of adapting their light-optical properties to those of the surrounding tooth structure.



Source: R&D Ivoclar Vivadent,

## Tetric EvoFlow for precise application

Tetric EvoFlow is a flowable universal composite for the anterior and posterior region.

Tetric EvoFlow, like Tetric Prime, is characterized by its distinctive chameleon effect and excellent handling properties. Tetric EvoFlow can be applied very precisely and is therefore suitable for creating minimally invasive anterior restorations and for use as a liner.

## Anterior restoration placed with Tetric EvoFlow A2 Dentin and Tetric Prime A2



restoration in tooth 12

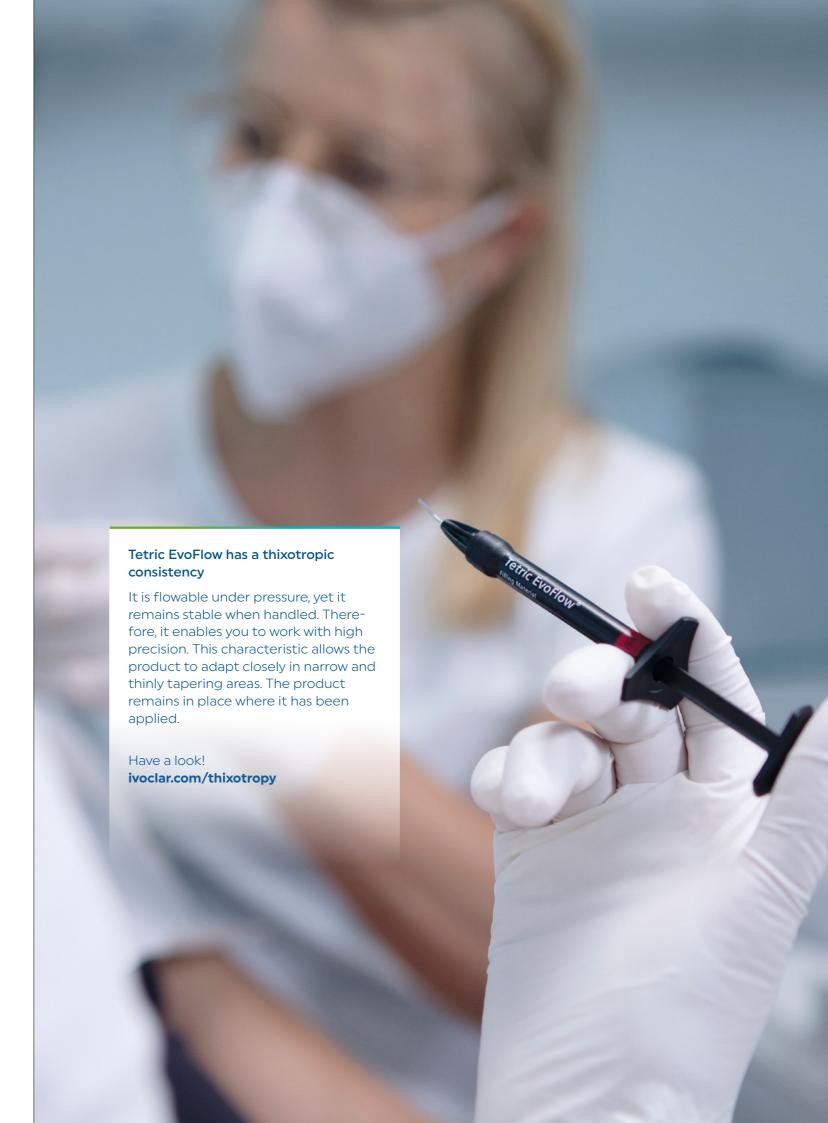


Final situation

Source: Dr Carola Pentelescu, Ivoclar Vivadent, Liechtenstein

## Esthetics - Quality - Efficiency

- ✓ Natural shade blend due to the distinctive chameleon effect
- ✓ Universally applicable enamel shades for small defects and cervical restorations
- ✓ Dentin shades featuring low translucency for concealing stains and for fulfilling demanding esthetic expectations
- ✓ Precise application due to thixotropic consistency
- ✓ Ideal complement as a liner in combination with Tetric Prime
- ✓ Easy to distinguish on X-rays due to high radiopacity



## Tetric PowerFlow for fast volume replacement

Tetric PowerFlow is a flowable 4-mm composite for true-to-nature esthetic results in the posterior region.

The material is characterized by low shrinkage, optimum flexural strength and reliable depth of cure. Therefore, the clinical performance of Tetric PowerFlow is just as impressive as that of conventional composites. As a result of its excellent adaptation to cavity walls, the product is ideal for repairing deep cavities. We recommend using Tetric PowerFlow in combination with Tetric PowerFill. It can also be used together with Tetric Prime.

## Esthetics - Quality - Efficiency

- ✓ True-to-nature esthetics for posterior restorations due to Ivocerin and Aessencio Technology
- ✓ Reliable curing of increments of up to 4 mm in thickness
- ✓ Low susceptibility to process-related air entrapment
- Excellent adaptation to cavity walls and fast volume replacement because of outstanding flow properties
- ✓ Effective combination with Tetric PowerFill and Tetric Prime

## Patented light initiator Ivocerin<sup>[7,8]</sup> and Aessencio Technology

Ivocerin ensures a reliable depth of cure of composite layers of up to 4 mm. The Aessencio Technology is responsible for gradually increasing the opacity of the initially translucent 4-mm composites during the light polymerization process. Ultimately, the materials attain the translucency levels of enamel and dentin and therefore assume a true-to-nature esthetic appearance.





[7] Ganster B et al., New photocleavable structures, 4. Acylgermane-based photoinitiator for visible light-curing, Macromolecular Rapid Commun. 2008, 29, 57-62. [8] Ganster B et al., New photocleavable structures, Diacylgerman-based photoinitiatorfor visible lightcuring, Macromolecules 2008, 41, 2394-2400.

## Tetric PowerFill for easy contouring

Tetric PowerFill is a sculptable 4-mm composite for true-to-nature esthetic results in the posterior region.

Similar to Tetric PowerFlow, Tetric PowerFill is characterized by reliable depth of cure<sup>[9-14]</sup>, low shrinkage<sup>[12,13]</sup> and optimum flexural strength<sup>[13-15]</sup>. In short: The clinical performance of Tetric PowerFill <sup>[13,16-18]</sup> is just as impressive and the results are just as esthetic<sup>[19,20]</sup> as those achieved with conventional composites. The low stickiness<sup>[21,22]</sup> of Tetric PowerFill facilitates the creation of anatomical structures.

## Esthetics - Quality - Efficiency

- ✓ True-to-nature esthetics for posterior restorations due to Ivocerin<sup>[23,24]</sup> and Aessencio Technology
- ✓ Excellent margin quality in combination with Adhese Universal<sup>[18]</sup>
- ✓ Reliable depth of cure of increments of up to 4 mm in thickness<sup>[9-14]</sup>
- ✓ Low susceptibility to process-related air entrapments<sup>[25, 26]</sup>
- ✓ Easy creation of anatomical structures because of low stickeness<sup>[21,22]</sup>
- ✓ Effective combination with Tetric PowerFlow

[9] Ilie N, Characteristics of composite and curing unit, Presentation, Munich, 2018. [10] Palin W, Polymerization characteristics of Tetric EvoCeram Bulk Fill and F-Composite 2, Study Report, Birmingham (UK), 2015. [11] Palin W, Hadis M, High irradiance polymerization of "flash-cured" resin composites, Study Report, Birmingham (UK), 2018. [12] Gebhardt B, Verification Report Tetric PowerFill, Test Report, Ivoclar Vivadent, 2017. [13] Lenz S, Research report of Tetric PowerFill, Test Report, Ivoclar Vivadent, 2019. [14] Ilie N, Characteristics of composite and curing unit, Study Report, Munich, 2019. [15] According to ISO 4049 [16] Cowen M, Powers J M, Bond strength laboratory evaluation of a new curing light and restoratives, Study Report, Dental Advisor, 2018. [17] Bock T, Research report Adhese Universal, Shear Bond Strength (SBS), Test Report, Ivoclar Vivadent, 2018. [18] Blunck U, Marginal adaptation study, Study Report, Berlin, 2018. [19] In the posterior region [20] Enggist L, Statistical comparison of aesthetical parameters in clinical studies, Test Report, Ivoclar Vivadent, 2020. [21] Lawson N, Clinical evaluation of a bulk fill resin composite, 24 month report, Study Report, Birmingham (US), 2020. [22] Cooper L, A 24-month clinical evaluation of an ultra-rapid polymerizing resin composite, Study Report, Chicago, 2020. [23] Ganster B et al., New photocleavable structures, 4. Acylgermane-based photoinitiator for visible lightcuring, Macromolecular Rapid Commun. 2008, 29, 57-62. [24] Ganster B et al., New photocleavable structures, Diacylgerman-based photo-initiator for visible lightcuring, Macromolecular Rapid Commun. 2008, 29, 57-62. [24] Ganster B et al., New photocleavable structures, Diacylgerman-based photo-initiator for visible lightcuring, Macromolecules 2008, 41, 2394-2400. [25] Heintze S, Design validation report Tetric PowerFill, Test Report, Ivoclar Vivadent, 2017. [26] Hirata R, Effect of sonic resin composite delivery on void formation assessed by micro-computed tomography, Operative Dentis









reoperative situation

epared cavity

Source: Dr Lukas Enggist, Ivoclar Vivadent, Liechtensteir

## Posterior tooth restoration made with Tetric PowerFlow and Tetric PowerFill

The images speak for themselves. Even when they are applied in layers of up to 4 mm, Tetric PowerFlow and Tetric PowerFill are capable of achieving highly esthetic results in posterior teeth.



## 4-mm composites for maximized efficiency

Tetric PowerFill and Tetric PowerFlow will increase the efficiency of your workflow<sup>[27-30]</sup> – whilst maintaining your customary high quality and esthetic standards.

Your patients will be pleased, because shorter treatment times mean less stress and discomfort for them.

### Streamlined treatment protocol

Since you can apply Tetric PowerFill and Tetric PowerFlow in increments of up to 4 mm, you will need to use fewer layers compared with conventional filling techniques. [31-33] In cavities of up to 4 mm in depth, one layer will be adequate. Fewer increments means having to switch less between the composite, the modelling instrument and the light-curing device – whilst achieving the same quality of the treatment results compared with conventional layering techniques.

### Fewer steps thanks to 4-mm increments





[27] Enggist L, Comparison of conventional workflow in direct filling therapy with 3sCure System: Time need in three different German dental offices, Test Report, Ivoclar Vivadent, 2020. [28] Ragazzini N, Comparison of restorative time of direct fillings class I & II placed with traditional layering technique or bulk layering technique, Clinical Report, Bologna, 2020. [29] Lebedenko A, Comparative fillings: Conventional layering technique versus 3sCure two-layer technique, Test Report, Ivoclar Vivadent, 2018. [30] Lawson N, Clinical evaluation of a bulk fill resin composite, 24-month report, Study Report, Birmingham (US), 2020. [31] Ilie N, Characteristics of composite and curing unit, Presentation, Munich, 2018. [32] Palin W, Polymerization characteristics of Tetric EvoCeram Bulk Fill and F-Composite 2, Study Report, Birmingham (UK), 2015. [33] Palin W, Hadis M, High irradiance polymerization of "flash-cured" resin composites, Study Report, Birmingham (UK), 2018. [34] Lenz S, Research report of Tetric PowerFill, Test Report, Ivoclar Vivadent, 2019. [35] Ilie N, Characteristics of composite and curing unit, Study Report, Munich, 2019. [36] Kopperud S E et al., Light curing procedures – performance, knowledge level and safety awareness among dentists, J Dent 2017, 58, 67-73. [37] Calheiros F C et al., Degree of conversion and mechanical properties of a BisGMA:TEGDMA composite as a function of the applied radiant exposure, J Biomed Mater Res B Appl Biomater 2008, 84, 503-509.

## Light exposure times from 3 seconds

Short light exposure times contribute to increasing the efficiency of the restorative treatment process. Modern curing lights such as Bluephase® PowerCure deliver up to 3000 mW/cm². Consequently, the required polymerization time can be reduced to 3 seconds. Tetric PowerFill<sup>[32-35]</sup> and Tetric PowerFlow in layers of up to 4-mm thickness can be cured in only 3 seconds.

At the same time, efficient curing processes and short exposure times increase the reliability and quality of the final restoration.<sup>[31,35]</sup> It is a well-known fact that inadequate light polymerization accounts for one of the most frequent sources of error in direct restorative treatments.<sup>[36,37]</sup>

### Tetric Line: Light exposure times at a glance

Products	Light intensity (mW/cm²)	Exposure time	
Tetric Prime, Tetric EvoFlow, Tetric PowerFill, Tetric PowerFlow	500-900	20 s	
Tetric Prime, Tetric EvoFlow, Tetric PowerFill, Tetric PowerFlow	900-1400	10 s	e.g. Bluephase G4
Tetric Prime, Tetric EvoFlow, Tetric PowerFlow	1800-2200	5 s	e.g. Bluephase Power Cure
Tetric PowerFill and PowerFlow	2700-3300	3 s	e.g. Bluephase Power Cure



## The 3s PowerCure product system for saving time

Reduce your treatment time in the posterior region by up to **51%**<sup>[42]</sup> and gain valuable time for yourself and your patients.

Take advantage of the efficiency offered by the complete 3s PowerCure product system. Bond with the Adhese® Universal VivaPen, restore with the 4-mm composites Tetric PowerFill and Tetric PowerFlow and light-cure with the intelligent Bluephase PowerCure.

Your benefit: When you place direct Class I and II restorations in permanent posterior teeth you can perform all the polymerization steps from the occlusal aspect in just 3 seconds each using a light intensity of 3000 mW/cm². In other words, you can cure Adhese Universal, Tetric PowerFill<sup>[38-41]</sup> and Tetric PowerFlow in the 3s-mode of the Bluephase PowerCure in 3 seconds each. As a result, you will more than halve the treatment time (51%).

Learn more about this topic by consulting our Scientific Documentation: ivoclar.com/3s-powercure/scientific-doc



## Delivery forms

Tetric Line - The solution for all cavities*		
Tetric Line Kit Syringe	1x Tetric PowerFill <sup>N</sup> A, 1x Tetric PowerFlow <sup>N</sup> A, 1x Tetric Prime A2, 1x Tetric Prime A1x Tetric Prime A2 Dentin, 1x Tetric EvoFlow A3, 1x Adhese Universal VivaPen	
Tetric Line Kit mixed	10 x Tetric PowerFill ™A, 1x 2-g syringe Tetric PowerFlow ™A, 10 x Tetric Prime A2, 10 x Tetric Prime A3, 5 x Tetric Prime A2 Dentin, 1x 2-g syringe Tetric EvoFlow A3, 1x Adhese Universal VivaPen	
Kits for enhanced efficiency in the posterior region		
Bluephase PowerCure and Kit syringe	1x Bluephase PowerCure 100-240V incl. Tetric PowerFill Kit: 1x 3-g syringe Tetric PowerFill NA, 1x 2-g syringe Tetric PowerFlow NA, 1x 2 ml Adhese Universal VivaPen	
Bluephase PowerCure and Kit mixed	1x Bluephase PowerCure 100–240V incl. Tetric PowerFill Kit: 20 x 0.2 g Tetric PowerFill *A, 1 x 2-g syringe Tetric PowerFlow *A, 1 x 2 ml Adhese Universal VivaPen	
Tetric PowerFill Kit syringe	1x 3-g syringe Tetric PowerFill ™A, 1x 2-g syringe Tetric PowerFlow ™A, 1x 2 ml Adhese Universal VivaPen	
Tetric PowerFill Kit mixed	20 x 0.2-g syringes Tetric PowerFill ™A, 1 x 2-g syringeTetric PowerFlow ™A, 1 x 2 ml Adhese Universal VivaPen	

 $Information\ about\ additional\ delivery\ forms\ is\ available\ here: \textbf{ivoclar.com/tetric-line/delivery-forms}$ 

## Learn more!



You will find more information about our Tetric line of products, including videos and additional documents on our website: ivoclar.com/tetric-line

[38] Ilie N, Characteristics of composite and curing unit, Study Report, Munich, 2019. [39] Ilie N, Characteristics of composite and curing unit, Presentation, Munich, 2018. [40] Palin W, Polymerization characteristics of Tetric EvoCeram Bulk Fill and F-Composite 2, Study Report, Birmingham (UK), 2015. [41] Palin W, Hadis M, High irradiance polymerization of "flash-cured" resin composites, Study Report, Birmingham (UK), 2018. [42] Lebedenko A, Comparative fillings: Conventional layering technique versus 3sCure two-layer technique, Test Report, Ivoclar Vivadent, 2018. \*Cavity classes I—Vaccording to G. V. Black

## Direct restoratives for efficient esthetics



Isolate
Comfortable isolation with
OptraGate and OptraDam



Bond Efficient bonding with the Adhese Universal VivaPen



Restore
Tetric Line - the solution for all cavities



Contour
Easy adaptation of
materials with OptraSculpt



Cure
High curing performance delivered by Bluephase polymerization lights



Polish Lustrous surfaces produced with OptraGloss



Protect
Effective prevention with
Fluor Protector S