

Heraeus

Venus®



Venus® Pearl composite
Beauty beyond aesthetics

heraeus-dental.com

Venus® Pearl composite – Beauty beyond aesthetics.

A new standard of care

Heraeus Dental is pleased to add the new nano hybrid composite Venus Pearl to its growing family of composite products. Since 2002, the Venus Family has provided restoration solutions that meet the highest aesthetic expectations of both dentists and their patients. The natural colouring options and benchmark durability introduced by Venus Diamond are now complemented by Venus Pearl, which is characterised by a softer consistency during sculpting.

The beauty of Venus Pearl composite is, of course, best seen in the highly aesthetic, long-lasting results, thanks to a unique multi-shade layering concept and sophisticated colour adaptation potential, which ensure indiscernible, natural-looking restorations.

The hidden beauty of Venus Pearl is how easily and conveniently it is to use and sculpt. The superior malleability of Venus Pearl makes it exceptionally well suited for anterior as well as posterior restorations. In either case, the strength, durability, low shrinkage stress, high lustre and other material properties provide dental professionals with a genuinely pleasant experience and the satisfaction of a job well done.

The colour and lustre of Venus Pearl can match the natural look of almost any tooth – or even a pearl – with striking precision



Benefits beyond the norm – experience the difference of Venus® Pearl composite.

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Venus® Pearl advantages

On the following pages learn about the many benefits of Venus Pearl composite:

- Easy and convenient handling – thanks to a creamy and low sticky consistency as well as excellent sculptability and polishability
- Superior physical properties – unique Heraeus urethane crosslinker formula enables low shrinkage stress, high flexural strength, and compatibility to commonly used bondings
- Long-lasting aesthetics – featuring a wide range of shades for exact colour adaptation based on 3 levels of translucency allowing multi-shade & single-shade layering techniques

Venus® Pearl – professional indications

Applications for which Venus Pearl excels:

- Direct restorations of Class I-V cavities (according to Black)
- Indirect restorations (inlays, veneers)
- Shape/shade corrections of teeth (due to diastema closure, congenital defect, etc.)
- Splinting of teeth loosened by trauma or periodontal disease
- Restoration of primary teeth
- Porcelain/composite repairs (combined with an appropriate repair system)
- Direct composite veneers
- Core build-up

Venus® Pearl composite – The beauty of easy and convenient handling.

Co-operative consistency

Simple and easy to use, the soft, creamy and low sticky consistency of Venus Pearl is exceptionally responsive and ideal for fine detailed work. That exceptional level of sculptability – in addition to its high degree of polishability – makes Venus Pearl the new standard of care for all types of direct restorations.



Venus Pearl affords excellent sculptability with a soft consistency that also keeps its shape well during modelling. Even after an hour, the functional surface build of Venus Pearl shows no slumping.

Making elegance easy

As a creamy, low sticky nano hybrid universal composite, Venus Pearl delivers excellent handling performance, making dentists' work less stressful and more efficient. The soft consistency readily allows brushing techniques in the anterior region, while offering particularly superb sculptability. Combined with the high lustre polish allowed by the filler system of Venus Pearl, the result is an aesthetically pleasing and long-lasting smile.



Initial situation showing unsatisfying aesthetics of central incisors



The beautiful appearance after restoration with Venus Pearl
(Courtesy of Prof. M. Peumans, Catholic University of Leuven, Belgium)

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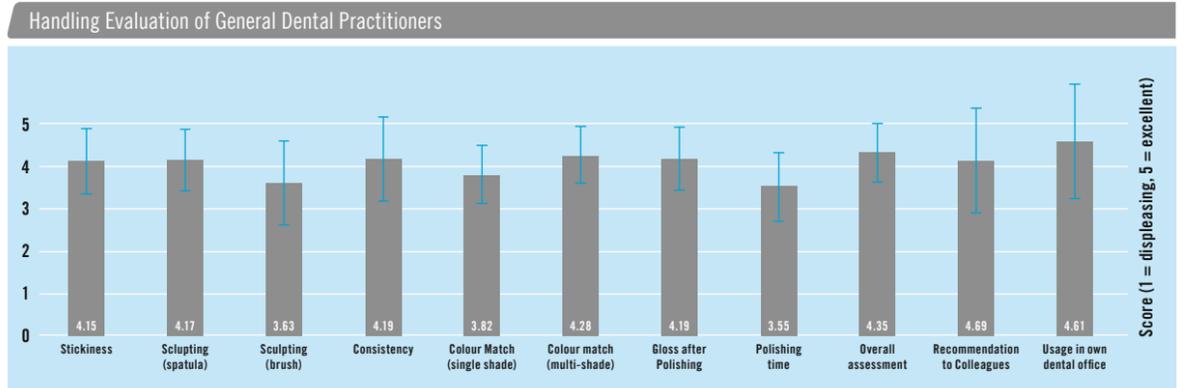
Building on a solid foundation

Tests have verified the professional user-friendliness of Venus Pearl. Sculpting restorations is easier thanks to the extended working time under operating conditions and the low stick relationship to dental instruments.

Handling Evaluation of General Dental Practitioners (March 2012)/ Field test

Handling, polishing quality and time, colour match and overall assessment were rated as outstanding

350 GDPs from 11 countries have received a questionnaire & Venus Pearl test material
256 GDPs have returned the form and 7054 Venus Pearl fillings (class I–V) were placed so far.



Source: Clinical Research Heraeus Kulzer GmbH, Dormagen, Germany. Unpublished data. Documentation available.

Venus® Pearl composite –

The beauty of superior physical properties.

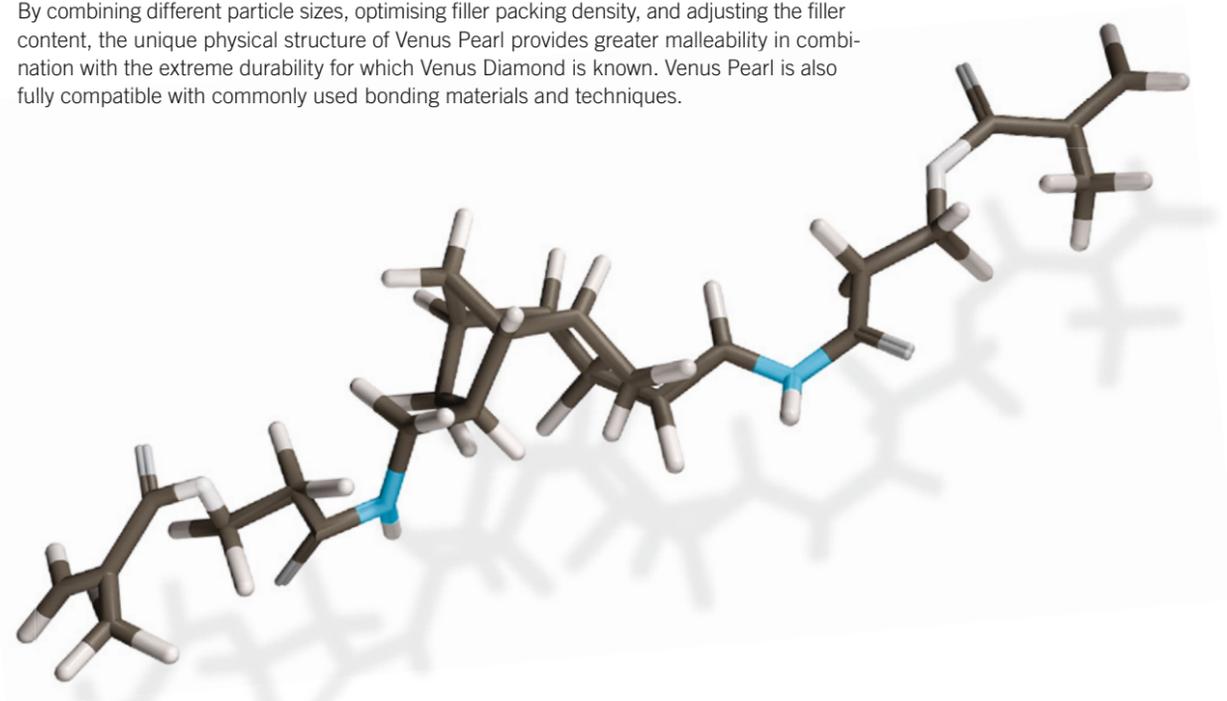
Our formula for success

Venus Pearl's superior physical properties derive from the unique Heraeus formula TCD-DI-HEA and UDMA. This innovative formula, which includes a urethane monomer and optimised filler system, results in a winning combination of very low shrinkage stress and high flexural strength, which crucially protects fillings against fracture and secondary caries – still the main reasons for direct restoration failure.

The perfect complement

The innovative molecular structure at the heart of Venus Pearl composite is a part of the new generation of nano hybrid composites developed by Heraeus Dental. The basic formula is already familiar from Venus Diamond, popular for its superb handling and other physical properties superior to conventional composites. Venus Pearl is the perfect complement to this success.

By combining different particle sizes, optimising filler packing density, and adjusting the filler content, the unique physical structure of Venus Pearl provides greater malleability in combination with the extreme durability for which Venus Diamond is known. Venus Pearl is also fully compatible with commonly used bonding materials and techniques.



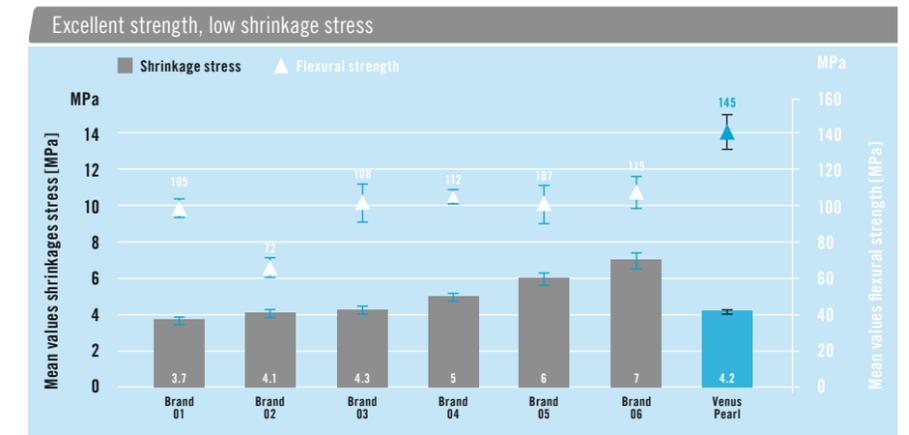
Unique Heraeus formula TCD-DI-HEA

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Greater malleability

The secret to Venus Pearl's greater malleability compared to Venus Diamond:

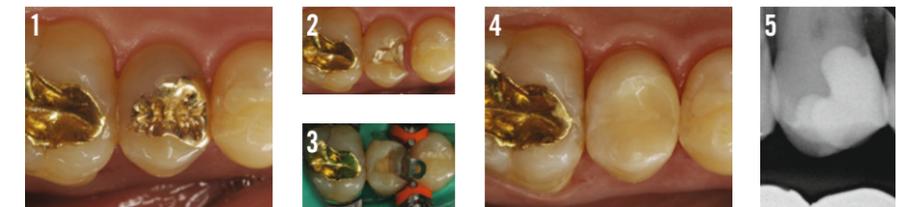
- Adjusting the filler system leads to a softer consistency
- Narrowing the particle size distribution: 5nm – 5µm
- Using 59% filler by volume, 80% filler by weight
- Combining Barium-Aluminium-Fluoride glass + pre-polymerised filler + a highly discrete nanofiller



Brand 1 Tetric EvoCeram
Brand 2 Estelite Sigma Quick
Brand 3 IPS Empress direct

Brand 4 Herculite XRV Ultra
Brand 5 Filtek Supreme XTE
Brand 6 Esthet X HD

Source: Internal data. Data on file.



Venus Pearl's increased strength allows minimally invasive direct restorations to preserve intact tooth structure in situations where gold restorations were formerly placed. The radiopacity of Venus Pearl ensures safety in X-ray diagnostics. (Courtesy of Prof. C.-P. Ernst, University of Mainz, Germany)

Venus® Pearl composite – The beauty of long-lasting aesthetics.

Exceptional endurance

Venus Pearl endures the wear and tear of time, restoring smiles to their natural beauty with a long-lasting effect. Whether it is chosen for economic restorations in a single shade or for sophisticated multi-shade layering, the lifelike aesthetics of Venus Pearl really last – and that makes everyone look good.

Exact colour adaptation

Venus Pearl composite is able to offer superior colour adaptation because of the perfectly adapted translucency and the fine alignment of the refraction index of the fillers and the matrix. In addition, with 27 separate shades and three levels of translucency, the result is virtually undetectable restorative margins. The material uniquely takes up the colour of the surrounding hard tooth substance, leading to a harmonious, natural look. In addition, the ultrafine filling particles allow for a polish that is exceptionally good and even comparable to natural enamel.

Venus Family composites are unique in their ability to blend inconspicuously with the colouring of the natural tooth. To show this effect of adaptation, a filling of shade A2 in a surrounding C2 reference was realized.



Single-shade or multi-shade layering

The Venus Family Shade Guide and Venus Pearl Layering Guide provide the perfect recipe for achieving an optimally aesthetic, multi-shade restoration. First, the Venus Family Shade Guide is used to select the best shade compared to the surrounding tooth colour. The Venus Pearl Layering Guide then recommends how to achieve that shade, either with a single-shade layering or, for more complex cases, by combining shades in a multi-shade layering technique.

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The Venus® Family range of shades

- **Opaque dentine shades** are used for replicating the opacity of dentine or for covering discoloured teeth: OLC (Opaque Light Chromatic), OMC (Opaque Medium Chromatic), ODC (Opaque Dark Chromatic) and OXDC (Opaque Extra Dark Chromatic).
- **Universal shades** possess colour intensities of medium translucency and are available in 14 shades. They can be used with or without additional layering and can be combined with the opaque dentine and/or incisal shades.
- **Incisal shades** have the highest translucency and the lowest colour intensity. CL (Clear) and AM (Amber) can be layered over the universal shade to create a more natural, life-like appearance. With the aid of the special incisal materials CO (Clear Opal) and YO (Yellow Opal), dentists can obtain the highest possible aesthetics due to the intrinsic opalescence of these shades.
- **Shades beyond the classic colour scale** include three bleaching shades (BL = Bleach Light, BXL = Bleach Extra Light, OB = Opaque Bleach), allowing aesthetic restorations after bleaching treatments. The new shade CORE has been developed for core build-ups in the posterior region. This shade has an extended depth of cure of 3 mm in order to allow thicker layers. Its green colour makes the extension of the posterior build-ups visible in the dark oral cavity. The brand new GUM shade was created for the reconstruction of gingiva in gingival recessions.



Pre-op situation showing Class IV cavities after removal of old restorations



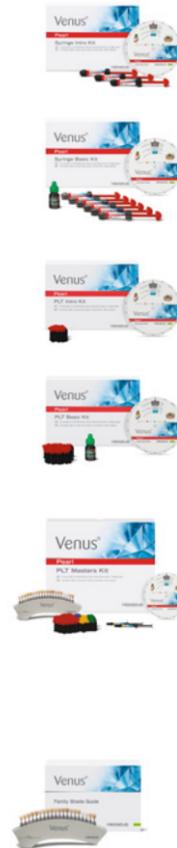
Beautiful and invisible restorations due to the outstanding colour adaptation of Venus Pearl (Courtesy of U. Krueger-Janson, Frankfurt a. M., Germany)

Venus® Pearl composite – Where science meets the art of beauty



Venus® Pearl – presenting products of choice

Product	Order no.
<ul style="list-style-type: none"> ▪ Venus Pearl Syringe Intro Kit 1x 3 g syringe each of the shades: Venus Pearl Layering Guide; Pictorial Card 	66048212 A2, A3, HKA2.5
<ul style="list-style-type: none"> ▪ Venus Pearl Syringe Basic Kit 1x 3 g syringe each of the shades: 1x 2 ml Bottle of iBOND Total Etch Venus Pearl Layering Guide; Pictorial Card 	66048213 A1, A2, A3, A3.5, A4, HKA2.5
<ul style="list-style-type: none"> ▪ Venus Pearl PLT Intro Kit 10x 0.2 g PLT each of the shades: Venus Pearl Layering Guide; Pictorial Card 	66048130 A2, A3, HKA2.5
<ul style="list-style-type: none"> ▪ Venus Pearl PLT Basic Kit 10x 0.2 g PLT each of the shades: 1 x 2 ml Bottle of iBOND Total Etch Venus Pearl Layering Guide; Pictorial Card 	66048211 A1, A2, A3, A3.5, A4, HKA2.5
<ul style="list-style-type: none"> ▪ Venus Pearl PLT Masters Kit 10x 0.2 g PLT each of the shades: 5x 0.2 g PLT each of the shades: 5x 0.3 g PLT of the shade: 2x 1.8 g Venus Diamond Flow Syringe Baseline Venus Family Shade Guide; Venus Pearl Layering Guide; Pictorial Card 	66048214 A1, A2, A3, A3.5, A4, HKA2.5 B1, B2, B3, C1, C2, C3, D3, CL, AM, CO, YO, OLC, OMC, ODC, OXDC, BL, BXL, OB, GUM, HKA5 CORE
<ul style="list-style-type: none"> ▪ Venus Family Shade Guide Shade Guide (compatible to Venus Pearl, Venus Diamond and Venus Diamond Flow) 	66048129



Please note that 66048211 and 66048213 do not contain iBOND Etch!
The new Venus Family Shade Guide is included in the Venus Pearl Masters Kit only.

Venus® colours – distinguishing shades of naturalness

Shades	Syringe 1x 3 g	PLT 20x 0.2 g	Shades	Syringe 1x 3 g	PLT 10x 0.2 g	PLT 10x 0.3 g
A1	66048175	66048090	Opaque Dentine Shades			
A2	66048176	66048141	OLC (Opaque Light Chromatic)	66048189	66048164	
A3	66048178	66048143	OMC (Opaque Medium Chromatic)	66048190	66048165	
A3.5	66048179	66048144	ODC (Opaque Dark Chromatic)	66048191	66048093	
A4	66048180	66048145	OXDC (Opaque Ex.Dark Chromatic)	66048192	66048094	
B1	66048182	66048147	Incisal Shades			
B2	66048183	66048148	CL (Clear Light)	66048196	66048098	
B3	66048184	66048149	AM (Amber)	66048197	66048099	
C1	66048185	66048150	CO (Clear Opal)	66048198	66048100	
C2	66048186	66048161	YO (Yellow Opal)	66048199	66048171	
C3	66048187	66048162	Bleach Shades			
D3	66048188	66048163	BL (Bleach Light)	66048193	66048096	
HKA2.5	66048177	66048142	BXL (Bleach Light Extra)	66048194	66048097	
HKA5	66048181	66048146	OB (Opaque Bleach)	66048195	66048095	
			CORE	66048200		66048172
			GUM	66048201	66048173	

Venus® – pioneering aesthetics

Since 2002, Venus has successfully and creatively addressed the needs and desires of dentists worldwide. The growing Venus Family currently includes:

- Venus Pearl
- Venus Diamond
- Venus Diamond Flow
- Venus Bulk Fill
- Venus Supra



Based on many years of experience in orthodontic adhesive technology, Heraeus Dental also provides light curing bonding with iBOND products. Offering easy handling, high performance and reliability, iBOND products are ideal for use with Venus Pearl.

iBOND Self Etch is a self-etching, one component adhesive for simplified application and high bond strength.

iBOND Total Etch is a two step (etch & rinse) bonding system that offers clinically proven reliable bond strength and optimal desensitisation in a one coat use.



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