

VITAVM[®]9

Product information



VITA shade determination

VITA shade communication

VITA shade reproduction

VITA shade control

Date of issue: 05.18

VITA – perfect match.

VITA

For veneering zirconia substructures and for individualizing VITABLOCS and VITA PM 9 restorations. Available in VITA SYSTEM 3D-MASTER and VITA classical A1 – D4 shades.

VITAVM.9 Perfectly matched for all indications

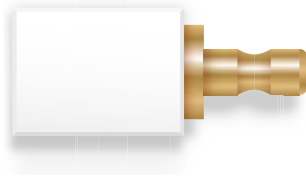
Veneering Material - VITAVM.9

available in VITA SYSTEM 3D-MASTER and VITA classical A1 – D4 shades

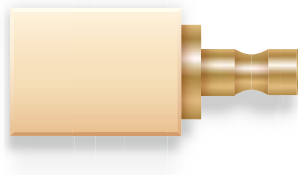


Machinable Materials

yttrium partially-stabilized zirconia substructures



VITABLOCS



Pressable Materials

VITA PM 9



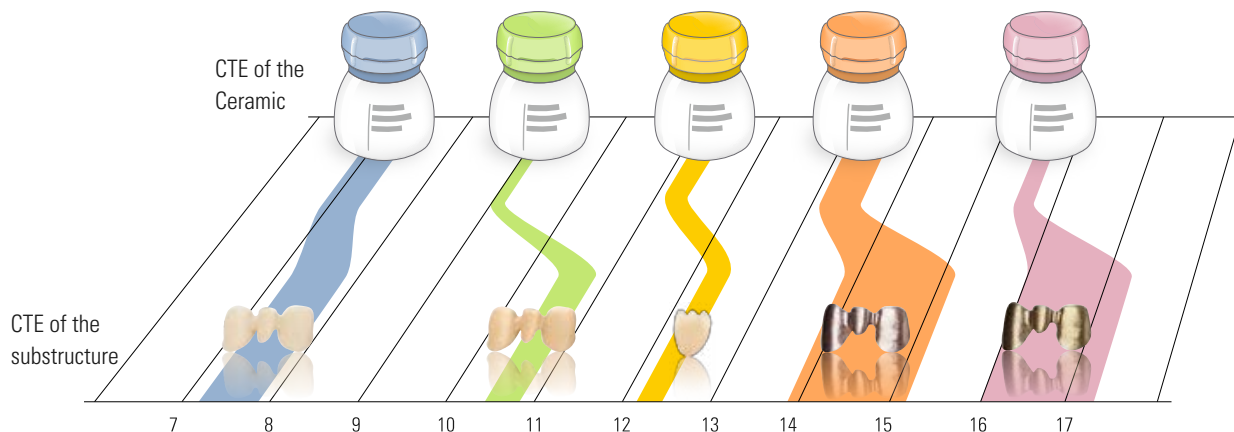
Flexibility and customization - these are the requirements that today's zirconia ceramics need to fulfill. The high-melting, fine-structure ceramic VITA VM 9, sets the benchmark in versatility. It is suitable for veneering zirconia substructures in the CTE range of 10.0 - 10.5, such as VITA YZ T. It is also recommended for individualizing restorations made from VITABLOCS MARK II ceramics and VITA PM 9 press ceramic pellets.

This ceramic also demonstrates the benefits of a typical VITA VM ceramic by offering numerous possibilities for esthetic design.

Your benefits at a glance:

- Natural shade and light effects, thanks to the fine structure
- Excellent bonding ensures reliable results
- Minimized shrinkage behavior reduces repeated firings
- Excellent modeling characteristics for fast and accurate application of the ceramic
- Comprehensive range of additional materials for individualization
- Process reliability based on many years of experience

VITAVM.9 Reliable use thanks to unmistakable classification



Veneering material

VITA VM 7
CTE (25–500°C) $6.9\text{--}7.3 \cdot 10^{-6} \cdot \text{K}^{-1}$

VITA TITANKERAMIK
CTE (25–500°C) $8.2\text{--}8.9 \cdot 10^{-6} \cdot \text{K}^{-1}$

VITA VM 9
CTE (25–500°C) $9.0\text{--}9.2 \cdot 10^{-6} \cdot \text{K}^{-1}$

VITA VM 11
CTE (25–500°C) $11.2\text{--}11.6 \cdot 10^{-6} \cdot \text{K}^{-1}$

VITA VM 13
CTE (25–500°C) $13.1\text{--}13.6 \cdot 10^{-6} \cdot \text{K}^{-1}$

VITA VM 15
CTE (25–500°C) $15.5\text{--}15.7 \cdot 10^{-6} \cdot \text{K}^{-1}$

Substructure material

special fine-structure feldspar veneering ceramic for all-ceramic substructure materials in the CTE range of 7.2–7.8 (made from Al_2O_3)

for titanium and titanium alloys
Titanium CTE (25–500°C), approx. $9.6 \cdot 10^{-6} \cdot \text{K}^{-1}$
 $\text{Ti}_6\text{Al}_4\text{V}$ CTE (25–500°C), approx. $10.2 \cdot 10^{-6} \cdot \text{K}^{-1}$

VITA YZ CTE (25–500°C) $10.0\text{--}10.5 \cdot 10^{-6} \cdot \text{K}^{-1}$
VITABLOCS CTE (25–500°C) approx. $9.4 \cdot 10^{-6} \cdot \text{K}^{-1}$
VITA PM 9 CTE (25–500°C) $9.0\text{--}9.5 \cdot 10^{-6} \cdot \text{K}^{-1}$

VITA SUPRINITY PC
CTE (25–500°C) approx. $12.3 \cdot 10^{-6} \cdot \text{K}^{-1}$

High gold content, reduced precious metal content, palladium based and non-precious alloys
CTE (25–600°C) $13.8\text{--}15.2 \cdot 10^{-6} \cdot \text{K}^{-1}$

Multi-indication alloys (especially eco alloys)
CTE (25–600°C) $16.0\text{--}17.3 \cdot 10^{-6} \cdot \text{K}^{-1}$

* further information on alloys can be found on the internet under Downloads.

VITAVM.9 Coordinated additional materials for top-quality individualization



Middle-aged tooth with lifelike appearance and effect of depth. This tooth was layered with BASE DENTINE, ENAMEL and additional, individual materials.

VITAVM.9 EFFECT ENAMEL
To prepare bluish translucent wedges

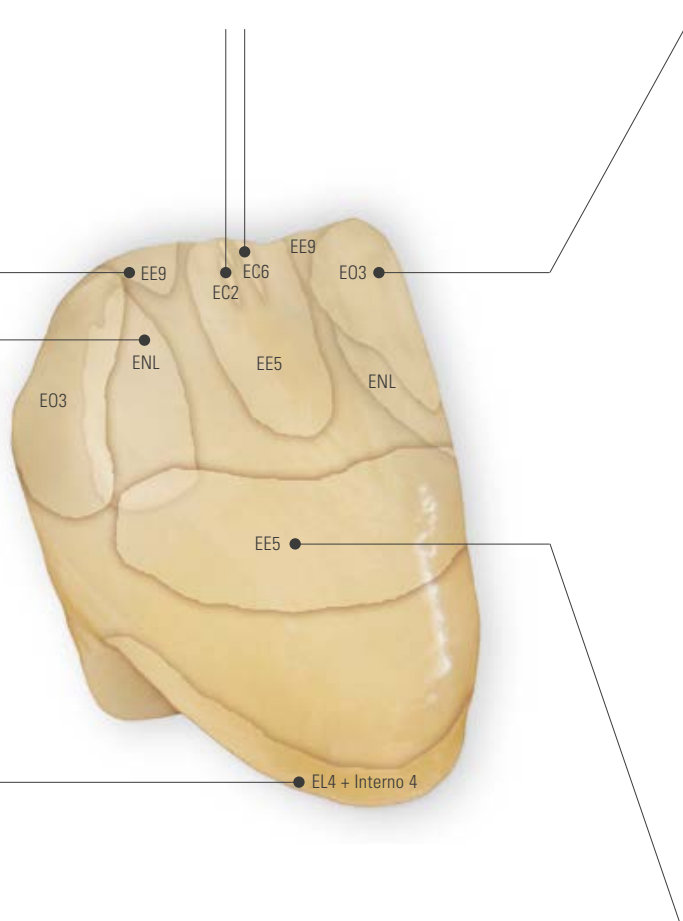
VITAVM.9 EFFECT CHROMA
To create minor nuances and lighter areas

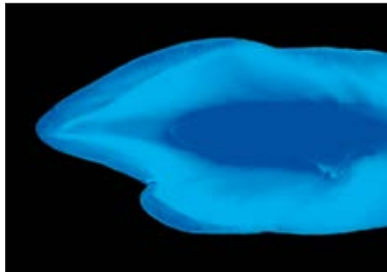
VITAVM.9 EFFECT OPAL
To create bluish orange areas

VITAVM.9 ENAMEL
To incorporate lighter mesial and distal edges

VITAVM.9 EFFECT LINER + VITA INTERNO®
To increase the fluorescence and translucency in the neck area

VITAVM.9 EFFECT ENAMEL
To increase the effect of depth by applying EE5 directly to BASE DENTINE





Vivid play of colors with VITAVM.9

The objective of any esthetic dental restoration is the reproduction of the fluorescence and opalescence of natural teeth. Like all VITA VM materials, VITA VM 9 excels in its refraction and reflection behavior, which can be compared to that of natural enamel.

The picture taken under UV light clearly shows that different levels of fluorescence are found in natural teeth.

Numerous VITA VM materials contain pigments which add fluorescence to the restorations. The use of additional fluorescent and opalescent materials leads to individual and esthetically appealing results.

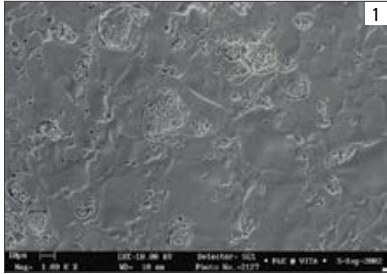
The EFFECT LINER and MAMELON materials, for example, feature particularly distinctive fluorescence.



Picture taken at daylight: abundance of variations of opal effects

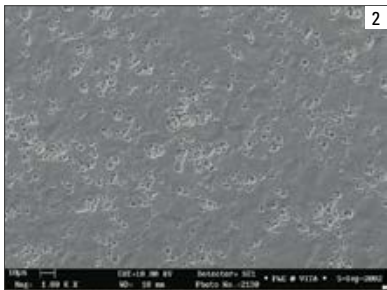
The EFFECT OPAL materials were especially developed to create the opal effect found in the surface of translucent and young teeth.





The conventional ceramic

The etched surface (etched for 20 seconds with VITA CERAMICS ETCH) reveals agglomerates of leucite crystals of up to 30 µm in diameter. The differences between the CTE values of the leucite agglomerates and those of the glass phase frequently result in stress cracks.



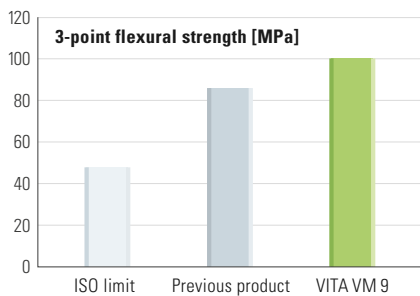
The fine difference

With VITA VM 9, a ceramic has been developed which clearly reveals more homogeneous distribution of the crystal and glass phases after firing, than conventional ceramics. This innovative fine-structure is unrivaled and characteristic for all ceramic components of the VITA VM concept – whether for metal or all-ceramic materials.

Fig. 1: SEM image of the surface of a ceramic with conventional structure (magnification 5000 x).

Fig. 2: SEM image of the surface of VITA VM 9 (magnification 5000 x).

The etched surface of VITA VM 9 reveals particularly fine and homogeneous distribution of the leucite crystals in the glass phase. As a result, the formation of stress cracks is avoided and a smooth and perfectly dense surface is created, which provides VITA VM 9 with excellent milling and polishing properties. Plus, the accumulation of plaque is considerably reduced and easy care and cleaning of restorations is enabled. The low solubility of VITA VM 9 ensures high resistance in the oral environment and a long wearing period.



Flexural strength

Flexural strength of VITA VM 9 compared with that of the previous product and the ISO limit according to ISO 6872.

VITAVM.9 Enamel-like abrasion behavior

All fine-structure VITA ceramics mimic natural dentition with excellent enamel-like properties, documented by VITA VM 7 and VITA VM 9 studies conducted by the Dental Clinic of the University of Zurich and the Goldman School of Medicine of the University of Boston.














































(Prof. Dr. Russel A. Giordano II, Boston University Prof. Dr. Edward A. McLaren, UCLA, Literature: E. A. McLaren, R. A. Giordano II, R. Pober, B. Abozenada "Zweiphasige Vollglas-Verblendkeramik", Quintessenz Zahntech 30, 1, 32-45 [2004])

Advantages of the innovative fine-structure ceramic:



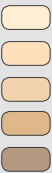





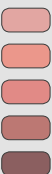

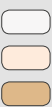

- Excellent bonding ensures reliable results
- Optimal processing characteristics, such as superior stability, minimized shrinkage behavior and high edge stability
- Outstanding firing stability, even after several firing processes
- Excellent grinding and polishing properties, especially in situ
- Increased stability in the oral environment
- Improved physical values, such as flexural strength
- Proven similarity with enamel








VITAVM[®]9 Additional materials

VITAVM[®]9 EFFECT ENAMEL – can be used for all enamel areas of the natural tooth – universally suitable translucent enamel effect material – to achieve a natural effect of depth		EE1	mint cream	whitish-translucent	
		EE2	pastel	pastel	
		EE3	misty rose	pink-translucent	
		EE4	vanilla	yellowish	
		EE5	sun light	yellowish-translucent	
		EE6	navajo	reddish-translucent	
		EE7	golden glow	orange-translucent	
		EE8	coral	red-translucent	
		EE9	water drop	bluish-translucent	
		EE10	silver lake blue	blue	
		EE11	drizzle	greyish-translucent	
VITAVM[®]9 EFFECT PEARL – only suitable for effects on the surface, not for layering in – perfectly suitable for bleached restorations		EP1	pearl	shade in pastel-yellow	
		EP2	pearl blush	shade in pastel-orange	
		EP3	pearl rose	shade in pastel-rosé	
VITAVM[®]9 EFFECT OPAL – to create the opal effect in restorations of young and translucent teeth		E01	opal	neutral, universally suitable	
		E02	opal whitish	whitish	
		E03	opal bluish	bluish	
		E04	opal blue	blue	
		E05	opal dark violet	dark violet	
VITAVM[®]9 EFFECT LINER – universally suitable to support and intensify the base shade – applied in the gingival area, enhances the distribution of light – can also be used for the washbake; the firing temperature, however, must be 970°C		EL1	snow	white	
		EL2	cream	beige	
		EL3	tabac	brown	
		EL4	golden fleece	yellow	
		EL5	papaya	orange	
		EL6	sesame	green-yellow	
VITAVM[®]9 MARGIN – for minor corrections at the margin area – after the application, the plastified MARGIN material must be hardened through the supply of heat; it is recommended to use a hair dryer or radiated heat from the furnace to stabilize the shoulder		M1	beige	white	
		M4	wheat	yellow	
		M5	amber	amber	
		M7	seashell	light beige	
		M8	tan	pastel-brown	
		M9	beach	light orange	
VITAVM[®]9 ADD-ON – low-melting materials (800°C) – especially for individualizing substructure-free VITA PM 9 restorations – are based on the fine-structure veneering material VITA VM 9 – 8 different shades		ADD1	B4229112	transparent	
		ADD2	B4229212	enamel, light	
		ADD3	B4229312	enamel, dark	
		ADD4	B4229412	whitish-transparent	
		ADD5	B4229512	yellowish-translucent	
		ADD6	B4229612	orange-translucent	
		ADD7	B4229712	red-translucent	
		ADD8	B4229812	blue-translucent	

VITAVM®9 Additional materials

<p>VITAVM®9 SUN DENTINE</p> <ul style="list-style-type: none"> – to obtain a brighter or warmer shade, the respective TRANSPA DENTINE can either be mixed with SUN DENTINE or replaced by SUN DENTINE 		<p>SD1</p> <p>SD2</p> <p>SD3</p>	<p>sun light light yellow</p> <p>sun rise light orange</p> <p>sun set orange-red</p>	
<p>VITAVM®9 CHROMA PLUS</p> <ul style="list-style-type: none"> – Chroma Plus materials can be used to achieve more intensive shade reproduction in the cervical region (especially with VITA classical A1–D4 shades) – In restorations with thin walls, they enhance the shade in an effective manner 		<p>CP1</p> <p>CP2</p> <p>CP3</p> <p>CP4</p> <p>CP5</p>	<p>ivory ivory</p> <p>almond beige</p> <p>moccasin light orange-brown</p> <p>caramel orange</p> <p>burlywood green-brown</p>	
<p>VITAVM®9 EFFECT CHROMA</p> <ul style="list-style-type: none"> – color-intensive modifier porcelains – to accentuate certain color areas of the tooth – to vary the lightness value in the neck, dentine and enamel areas 		<p>EC1</p> <p>EC2</p> <p>EC3</p> <p>EC4</p> <p>EC5</p> <p>EC6</p> <p>EC7</p> <p>EC8</p> <p>EC9</p> <p>EC10</p> <p>EC11</p>	<p>ghost white</p> <p>linen sand-beige</p> <p>pale banana light yellow</p> <p>lemon drop tender lemon yellow</p> <p>golden rod light orange</p> <p>sunflower orange</p> <p>light salmon pink</p> <p>toffee beige-brown</p> <p>doe brown</p> <p>larch green-brown</p> <p>gravel green-grey</p>	
<p>VITAVM®9 MAMELON</p> <ul style="list-style-type: none"> – highly fluorescent porcelain, which is mainly used in the incisal area – for shade characterization between incisal edge and dentine 		<p>MM1</p> <p>MM2</p> <p>MM3</p>	<p>ecru beige</p> <p>mellow buff warm yellow-brown</p> <p>peach puff tender orange</p>	
<p>VITAVM®9 GINGIVA</p> <ul style="list-style-type: none"> – to restore the original gingival situation – are applied and fired during the first and / or second dentine firing – color nuances range from orange-red and reddish to brown-red 		<p>G1</p> <p>G2</p> <p>G3</p> <p>G4</p> <p>G5</p>	<p>rose dusky pink</p> <p>nectarine orange-pink</p> <p>pink grapefruit pink</p> <p>rosewood brown-red</p> <p>cherry brown dark red</p>	
<p>VITAVM®9 CORRECTIVE</p> <ul style="list-style-type: none"> – with reduced firing temperature (760°C) for corrections after glaze firing – in three nuances for neck, dentine and enamel areas 		<p>COR1</p> <p>COR2</p> <p>COR3</p>	<p>neutral neutral</p> <p>sand beige</p> <p>ochre brown</p>	






VITAVM.9 Modular and efficient assortment kit options

	<p>VITAVM.9 BASIC KIT* Basic kit for BASIC layering (also available as BASIC KIT SMALL, with reduced range of materials)</p>
	<p>VITAVM.9 BUILD UP KIT* Add-on assortment for BUILD UP layering (also available as BUILD UP KIT SMALL, with reduced range of materials)</p>
	<p>VITAVM.9 CLASSICAL COLOR KIT Assortment for VITA VM 9 3D-MASTER customers who wish to add VITA classical shades A1–D4 shades to their assortment. The kit contains 16 BASE DENTINE materials for BASIC layering and 16 additional TRANSPA DENTINE materials for BUILD-UP layering.</p>
	<p>VITAVM.9 PROFESSIONAL KIT** For incorporating all natural effects and characteristics (also available as PROFESSIONAL KIT SMALL)</p>
	<p>VITAVM.9 BLEACHED COLOR KIT Ultra-bright shades for the reproduction of bleached teeth</p>
	<p>VITAVM.9 GINGIVA KIT** Gingiva materials with natural effects</p>
	<p>VITAVM.9 MARGIN KIT** For minor corrections in the margin areas to create an esthetic transition</p>
	<p>VITAVM.9 ADD-ON KIT** Set of individualization materials and accessories</p>

* Available in VITA SYSTEM 3D-MASTER and VITA classical A1–D4 shades.

** Can be used for VITA SYSTEM 3D-MASTER and VITA A1–D4 shades

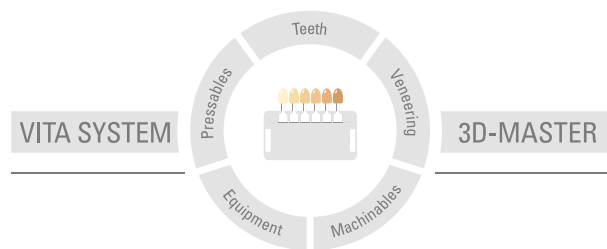
VITAVM.9 All from one experienced and competent partner

	<p>VITA Easyshade® V For digital shade determination, use VITA Easyshade Advance V, and for visual shade determination the VITA Linearguide 3D-MASTER or VITA classical A1–D4, for example.</p>
	<p>VITA YZ® SOLUTIONS The translucent VITA YZ is available for CAD/CAM fabrication. VITA VM 9 is perfectly suited for individualizing VITABLOCS and VITA PM 9.</p>
	<p>VITA VACUMAT® 6000 M furnace and VITA V60 i-Line® Ceramic firings should preferably be carried out with the VITA VACUMAT 6000 M premium furnace or with the versatile VITA V60 i-Line furnace.</p>
	<p>VITA AKZENT® Plus With VITA AKZENT PLUS stains, you can optimize the shade of all types of dental ceramic restorations simply and efficiently, regardless of the CTE of the restoration.</p>
	<p>VITA INTERNO® The materials offer the ability to create in-depth shade effects. Their high fluorescence adds very high luminosity to the shades.</p>

For more information visit www.vita-zahnfabrik.com

VITA VM 9 veneering material is available in VITA SYSTEM 3D-MASTER and VITA classical A1–D4 shades. Shade compatibility with all VITA 3D-MASTER and VITA classical materials is guaranteed.

With the unique VITA SYSTEM 3D-MASTER, all natural tooth shades can be systematically determined and perfectly reproduced.



Please note: Our products must be used in accordance with the instructions for use. We accept no liability for any damage resulting from incorrect handling or usage. The user is furthermore obliged to check the product before use with regard to its suitability for the intended area of applications. We cannot accept any liability if the product is used in conjunction with materials and equipment from other manufacturers that are not compatible or not authorized for use with our product. Furthermore, our liability for the accuracy of this information is independent of the legal basis and, in as far as legally permissible, shall always be limited to the value as invoiced of the goods supplied, excluding value-added tax. In particular, as far as legally permissible, we do not assume any liability for loss of earnings, indirect damages, ensuing damages or for third-party claims against the purchaser. Claims for damages based on fault liability (culpa in contrahendo, breach of contract, unlawful acts, etc.) can only be made in the case of intent or gross negligence. The VITA Modulbox is not necessarily a component of the product. Date of issue of this instruction for use: 05.18

On publication of these instructions for use, previous versions will no longer be valid. The current version can be found under www.vita-zahnfabrik.com

VITA Zahnfabrik has been certified in accordance with the Medical Device Directive and the following products bear the CE mark  0124:

VITAVM[®]9

The photos on page 5 were taken with the kind support of Mr. Claude Sieber.

VITA

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