VITA**VM**®**9**

Product information

VITA shade determination | VITA shade communication | VITA shade reproduction | VITA shade control

Date of issue 07.17

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.

VITA**VM**®**9** Perfectly matched with all indications

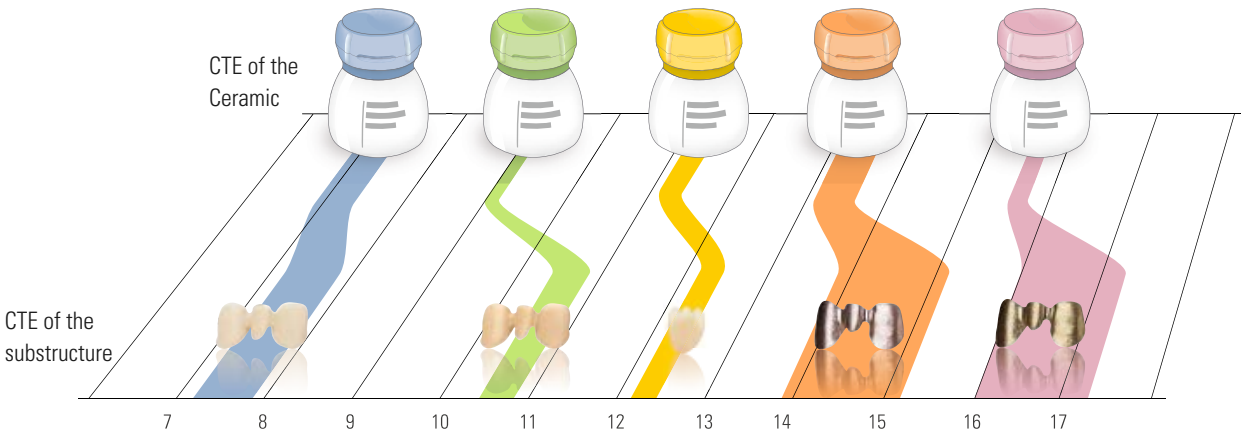
Flexibility and customization - these are the requirements that today's zirconia ceramics need to fulfill.
The high-melting, fine-structure ceramic VITA VM 9 sets the benchmark in versatility.
It is used for veneering zirconia substructures in the CTE range of approx. 10.5 such as VITA YZ.
Additionally, it is recommended for customizing 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 to reduce 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

VITA**VM**®**9** Reliable use thanks to unmistakable classification



Veneering material	Substructure material
VITA VM 7 CTE (25–500°C) 6.9–7.3 · 10^{-6} · K^{-1}	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)
VITA TITANIUM PORCELAIN CTE (25–500°C) 8.2–8.9 · 10^{-6} · K^{-1}	for titanium and titanium alloys Titanium CTE (25–500°C), approx. 9.6 · 10^{-6} · K^{-1} Ti_6Al_4V CTE (25–500°C), approx. 10.2 · 10^{-6} · K^{-1}
VITA VM 9 CTE (25–500°C) 9.0–9.2 · 10^{-6} · K^{-1}	VITA YZ CTE (25–500°C) approx. 10.5 · 10^{-6} · K^{-1} VITABLOCS CTE (25–500°C) approx. 9.4 · 10^{-6} · K^{-1} VITA PM 9 CTE (25–500°C) 9.0–9.5 · 10^{-6} · K^{-1}
VITA VM 11 CTE (25–500°C) 11.2–11.6 · 10^{-6} · K^{-1}	VITA SUPRINITY PC CTE (25–500°C) approx. 12.3 · 10^{-6} · K^{-1}
VITA VM 13 CTE (25–500°C) 13.1–13.6 · 10^{-6} · K^{-1}	High gold content, reduced precious metal content, palladium based and non-precious alloys CTE (25–600°C) 13.8–15.2 · 10^{-6} · K^{-1} *
VITA VM 15 CTE (25–500°C) 15.5–15.7 · 10^{-6} · K^{-1}	Multi-indication alloys (especially eco alloys) CTE (25–600°C) 16.0–17.3 · 10^{-6} · K^{-1} *

* visit the download section of our website for more information about alloys

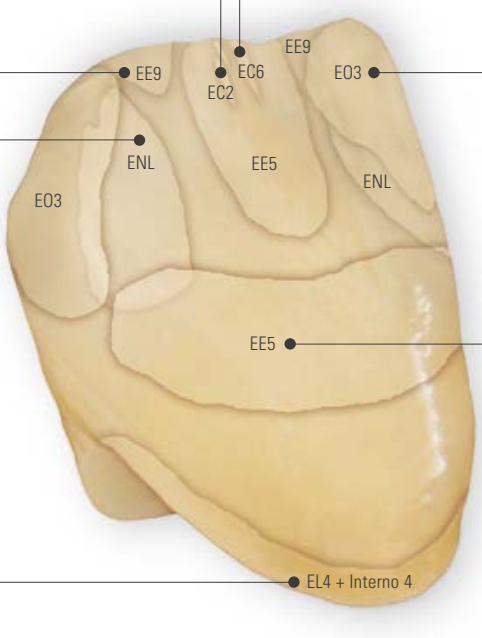
VITA**VM®9** Matched additional materials for top-quality individualization

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

VITA**VM®9 EFFECT ENAMEL**
To prepare bluish translucent wedges

VITA**VM®9 EFFECT CHROMA**
To create minor nuances and lighter areas

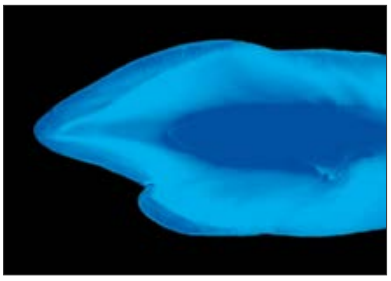
VITA**VM®9 EFFECT OPAL**
To create bluish orange areas



VITA**VM®9 ENAMEL**
To incorporate lighter mesial and distal edges

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

VITA**VM®9 EFFECT ENAMEL**
To increase the effect of depth by applying EE5 directly to BASE DENTINE



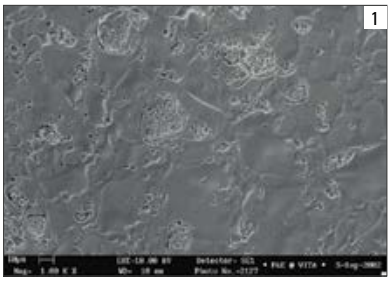
Vivid play of colors with VITA**VM®9**
The objective of any esthetic dental restoration is the reproduction of the fluorescence and opalescence of natural teeth. Like all VITA VM materials, VITA VM 9 excels in its refraction and reflection behavior which can be compared to that of enamel.

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 fluorescent and opalescent additional 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.

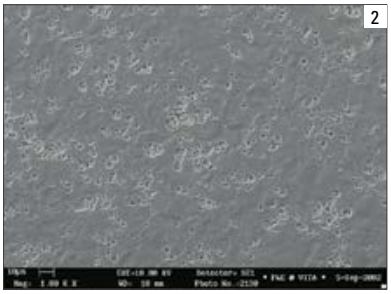


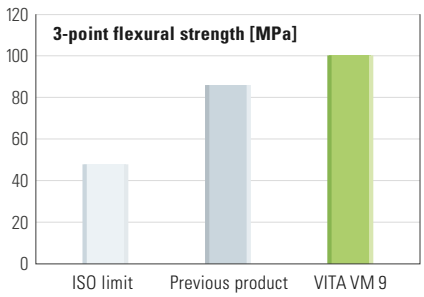
Fig. 1: SEM image of the surface of a ceramic with conventional structure (magnification 5000 x).

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

The 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.

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 are enabled.
The low solubility of VITA VM 9 ensures high resistance in the oral environment and prolonged period of wearing.



Flexural strength

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

All fine-structure ceramics of VITA are convincing because of their excellent enamel-like properties, which is documented by the studies of the Dental Clinic of the University of Zurich and the Goldman School of Medicine of the University of Boston carried out with VITA VM 7 and VITA VM 9.

(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

VITA**VM**®**9** Additional materials

VITA VM®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	
VITA VM®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	
VITA VM®9 EFFECT OPAL – to create the opal effect in restorations of young and translucent teeth	EO1	opal	neutral, universally suitable	
	EO2	opal whitish	whitish	
	EO3	opal bluish	bluish	
	EO4	opal blue	blue	
	EO5	opal dark violet	dark violet	
VITA VM®9 EFFECT LINER – universally suitable to support and intensify the base shade – applied in the gingival area, they enhance 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	
VITA VM®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	
VITA VM®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	

VITA**VM**®**9** Additional materials

VITA VM®9 SUN DENTINE – to obtain a brighter or warmer shade, the respective TRANSPA DENTINE can either be mixed with SUN DENTINE or replaced by SUN DENTINE	SD1	sun light	light yellow	
	SD2	sun rise	light orange	
	SD3	sun set	orange-red	
VITA VM®9 CHROMA PLUS – Chroma Plus materials can be used to achieve more intensive shade reproduction in the cervical region (especially with VITA classical A1–D4 shades) – in case of thin walls, they enhance the shade in an efficient manner	CP1	ivory	ivory	
	CP2	almond	beige	
	CP3	moccasin	light orange-brown	
	CP4	caramel	orange	
	CP5	burlywood	green-brown	
VITA VM®9 EFFECT CHROMA – color-intensive modifier porcelains – to accentuate certain color areas of the tooth – to vary the lightness value in the neck, dentine and enamel areas	EC1	ghost	white	
	EC2	linen	sand-beige	
	EC3	pale banana	light yellow	
	EC4	lemon drop	tender lemon yellow	
	EC5	golden rod	light orange	
	EC6	sunflower	orange	
	EC7	light salmon	pink	
	EC8	toffee	beige-brown	
	EC9	doe	brown	
	EC10	larch	green-brown	
	EC11	gravel	green-grey	
VITA VM®9 MAMELON – highly fluorescent porcelain which is mainly used in the incisal area – for shade characterization between incisal edge and dentine	MM1	ecru	beige	
	MM2	mellow buff	warm yellow-brown	
	MM3	peach puff	tender orange	
VITA VM®9 GINGIVA – 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	G1	rose	dusky pink	
	G2	nectarine	orange-pink	
	G3	pink grapefruit	pink	
	G4	rosewood	brown-red	
	G5	cherry brown	dark red	
VITA VM®9 CORRECTIVE – with reduced firing temperature (760°C) for corrections after glaze firing – in three nuances for neck, dentine and enamel areas	COR1	neutral	neutral	
	COR2	sand	beige	
	COR3	ochre	brown	

VITA**VM®9** Modular and efficient arrangement of assortments

	VITA**VM®9 BASIC KIT*** Basic kit for BASIC layering (also available as BASIC KIT SMALL with reduced range of materials)
	VITA**VM®9 BUILD UP KIT*** Add-on assortment for BUILD UP layering (also available as BUILD UP KIT SMALL with reduced range of materials)
	VITA**VM®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.
	VITA**VM®9 PROFESSIONAL KIT**** For incorporating all natural effects and characteristics (also available as PROFESSIONAL KIT SMALL)
	VITA**VM®9 BLEACHED COLOR KIT** Ultra-bright shades for the reproduction of bleached teeth
	VITA**VM®9 GINGIVA KIT**** Gingiva materials with natural effects
	VITA**VM®9 MARGIN KIT**** For minor corrections in the area of margins to create an esthetic transition
	VITA**VM®9 ADD-ON KIT**** Set of individualization materials and accessories

* 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

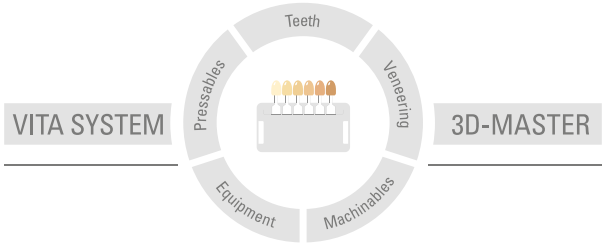
VITA**VM**®**9** All from one experienced and competent partner

	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.
	VITA YZ® The translucent VITA YZ is available for CAD/CAM fabrication. VITA VM 9 is perfectly suited for individualizing VITABLOCS and VITA PM 9.
	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.
	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.
	VITA INTERNO® The materials offer the ability to create in-depth shade effects. Their high fluorescence adds very high luminosity to the shades.

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 SYSTEM 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.



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After the publication of these information for use any previous versions become obsolete. The current version can be found at www.vita-zahnfabrik.com

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

VITA**VM®9**

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

VITA

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