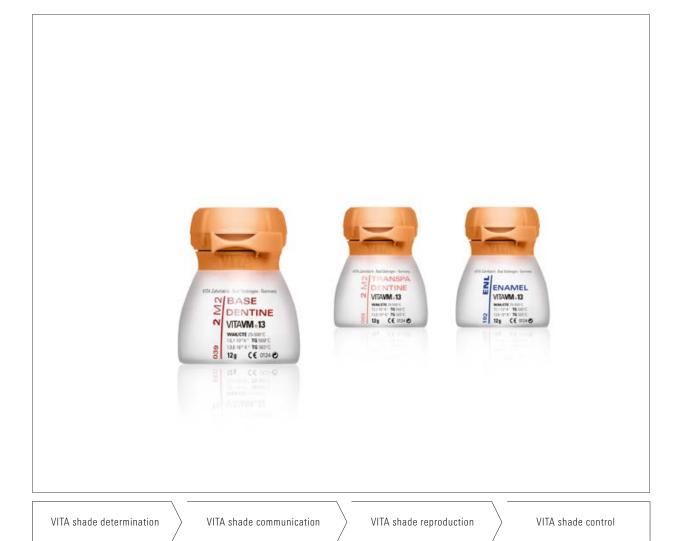
VITAVM_®13

Product information



VITA – perfect match.



For veneering metal substructures in the conventional CTE range.

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

Veneering Material · VITAVM®13

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



Matched with all alloys

high gold content reduced gold content palladium-based precious metal-free

VITA VM 13 is a highly-esthetic, fine-structure feldspar ceramic that is perfectly adapted to the CTE value of conventional bonding alloys (approx. 13.8 – 15.2 mK), regardless of whether the conventional alloys are cast, milled or sintered.

VITA VM 13 provides a genuine alternative to all-ceramics, and works well wherever the masking effect of a metal framework is required.

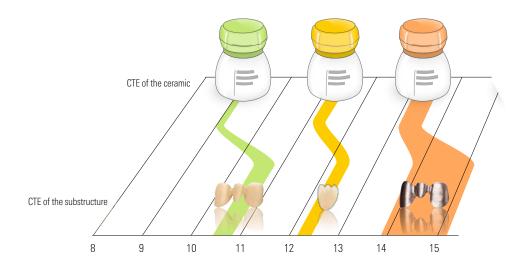
The firing temperature (880°C, dentin firing) provides tremendous processing reliability, particularly for alloys with a low solidus temperature (<1100°C).

VITA VM 13 is a high-quality system component that is part of the innovative VITA VM concept.

Your benefits at a glance:

- Natural shade and light effects, thanks to the fine structure
- Comprehensive range of additional materials for outstanding processing
- Can be individualized using VITA AKZENT Plus and VITA INTERNO
- Process reliability, thanks to long-standing experience
- Available in VITA SYSTEM 3D-MASTER and VITA classical A1-D4 shades

VITAVM.13 Reliable use, thanks to clear classification.



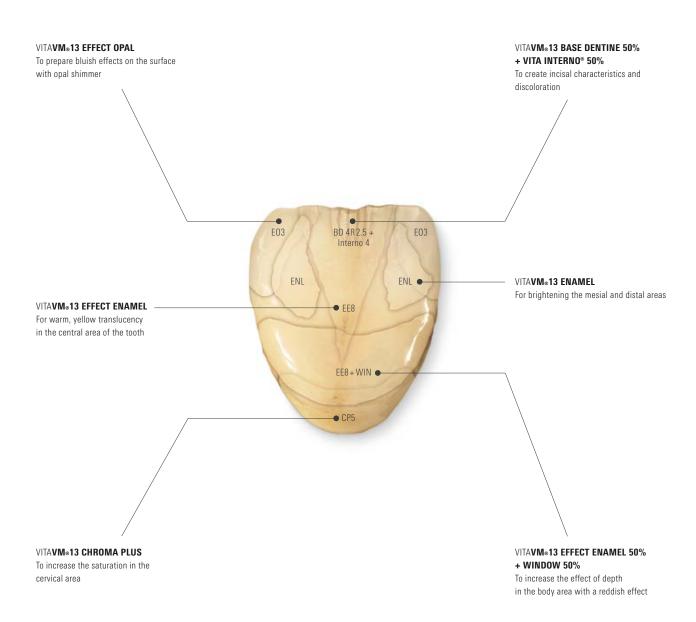
Veneering material	Substructure material				
VITA VM 9 CTE (25–500°C) 9.0–9.2 · 10 ⁻⁶ · K ⁻¹	VITA YZ CTE (25–500°C) approx. $10.5 \cdot 10^{-6} \cdot \text{K}^{-1}$ VITABLOCS CTE (25–500°C) approx. $9.4 \cdot 10^{-6} \cdot \text{K}^{-1}$ VITA PM 9 CTE (25–500°C) $9.0-9.5 \cdot 10^{-6} \cdot \text{K}^{-1}$				
VITA VM 11 CTE (25–500°C) 11.2–11.6 · 10 ⁻⁶ · K ⁻¹	VITA SUPRINITY PC Zirconia reinforced lithium silicate glass ceramic CTE (25–600°C) approx. 12.3 \cdot 10 ⁻⁶ \cdot 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				

 $[\]ensuremath{^*}\xspace$ visit the download section of our website for more information about alloys

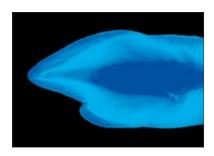
VITAVM.13 Coordinated additional materials for top-quality individualization



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



VITAVM₆13 Natural esthetics



Vivid play of colors with VITAVM®13

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 13 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.

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



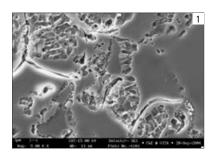
Picture taken at daylight: abundance of variations of opal effects

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





VITAVM.13 Homogeneous surface



The conventional metal ceramic

The etched surface reveals agglomerates of leucite crystals in the glass phase. The differences in the CTE of the leucite agglomerates and the glass phase may result in stress cracks.

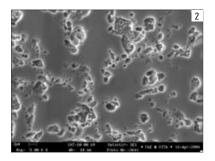


Fig. 1: SEM image of the surface of a conventional metal ceramic (magnification 5000 x)

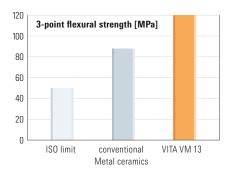
Fig. 2: SEM image of the surface of VITA VM 13 (magnification 5000 x).

The fine difference

With VITA VM 13, 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 characteristic for all ceramic components of the VITA VM concept — for metal-ceramic or all-ceramic materials alike.

The etched surface of VITA VM 13 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 13 with excellent milling and polishing properties. As a result, the accumulation of plaque on the ceramic surface is considerably reduced and easy care and cleaning of restorations are enabled.

The low solubility also ensures high resistance in the oral environment and a prolonged period of wearing.



Improved physical properties

VITA VM 13 features a variety of improved physical properties. These include, among others, the flexural strength, bonding strength and thermal resistance with lower solubility in acids.

3-point flexural strength of VITA VM 13 compared with that of a conventional metal ceramic and the ISO limit according to ISO 6872.

VITAVM.13 Enamel-like abrasion behavior

All fine-structure VITA ceramics mimic natural dentition with excellent enamellike 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.

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:

- Optimal processing characteristics such as superior stability, minimized shrinkage behavior and high-edge stability
- Impressive firing stability, even after several firing processes
- Excellent grinding and polishing properties due to homogeneous and sealed surfaces
- Proven similarity with enamel



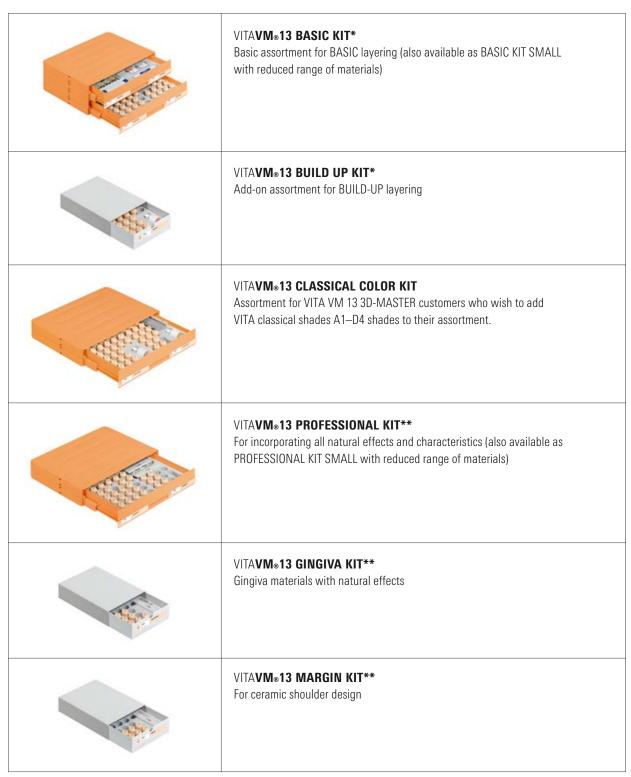
VITAVM.13 Additional materials

VITA VM 13 EFFECT LINER - to control the fluorescence from the depth of the restoration - universally suitable to support and intensify the base shade - applied in the gingival area, they enhance the distribution of light VITA VM 13 MARGIN - to create an esthetic transition in the case of a labially shortened metal coping - 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	EL1 EL2 EL3 EL4 EL5 EL6 M1 M4 M5 M7 M8 M9	snow cream tabac golden fleece papaya sesame icy beige wheat amber seashell tan beach	white beige brown yellow orange green-yellow white yellow amber light beige pastel-brown light orange	EFFECT LINER TOWNS TO THE PROPERTY OF THE PROP
VITA VM 13 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 EC2 EC3 EC4 EC5 EC6 EC7 EC8 EC9 EC10	ghost linen pale banana lemon drop golden rod sunflower light salmon toffee doe larch gravel	white sand-beige light yellow tender lemon yellow light orange orange pink beige-brown brown green-brown green-grey	EFFECT CHROMA VIAM-13
VITA VM 13 MAMELON - highly fluorescent porcelain, which is mainly used in the incisal area - for shade characterization between incisal edge and dentine	MM1 MM2 MM3	ecru mellow buff peach puff	beige warm yellow-brown tender orange	MAMELON VIAWM-13
VITA VM 13 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 CP2 CP3 CP4 CP5	ivory almond moccasin caramel burlywood	ivory beige light orange-brown orange green-brown	CHROMA PLUS
VITA VM 13 CORRECTIVE - with reduced firing temperature (830°C) for corrections after glaze firing - in three nuances for neck, dentine and enamel areas	COR1 COR2 COR3	neutral sand ochre	neutral beige brown	CORRECTIVE WITHWARD 13

VITAVM.13 Additional materials

VITA VM 13 SUN OPAQUE – for mixing the respective opaque shades – in three different nuances	S01 S02 S03	yellowish medium reddish	yellowish orange reddish	SUN OPAQUE WIVWM-13
VITA VM 13 SUN DENTINE — for a "sunnier" and warmer shade result — to be used in the dentine and body area	SD1 SD2 SD3	sun light sun rise sun set	light yellow light orange orange-red	SUN DENTINE UNIVALID O
VITA VM 13 EFFECT ENAMEL - can be used for all enamel areas of the natural tooth - universally suitable translucent enamel effect materials - to achieve a natural effect of depth	EE1 EE2 EE3 EE4 EE5 EE6 EE7 EE8 EE9 EE10 EE11	mint cream pastel misty rose vanilla sun light navajo golden glow coral water drop silver lake blue drizzle	whitish-translucent pastel pink-translucent yellowish yellowish-translucent reddish-translucent orange-translucent red-translucent bluish-translucent blue greyish-translucent	EFFECT ENAMEL UTVWM-13
VITA VM 13 EFFECT PEARL - only suitable for effects on the surface, not for layering in - perfectly suitable for bleached restorations - to obtain nuances of yellow and red	EP1 EP2 EP3	pearl pearl blush pearl rose	shade in pastel-yellow shade in pastel-orange shade in pastel-rosé	EFFECT PEARL VILVAMAIS
VITA VM 13 EFFECT OPAL — to create the opal effect in restorations of young and highly translucent teeth	E01 E02 E03 E04 E05	opal opal whitish opal bluish opal blue opal dark violet	neutral, universally suitable whitish bluish blue dark violet	EFFECT OPAL VITAVM-13 Oui
VITA VM 13 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 G2 G3 G4 G5 G0L G0D	rose nectarine pink grapefruit rosewood cherry brown light flesh dark flesh	dusky pink orange-pink pink brown-red dark red light pink dark pink	GINGIVA
VITA VM 13 COLOR OPAQUE — shade-intensive opaque materials for the characterization of enamel and cervical areas	C01 C02 C03	gold brown lilac	orange brown lilac	COLOR OPAQUE WITVWH.13

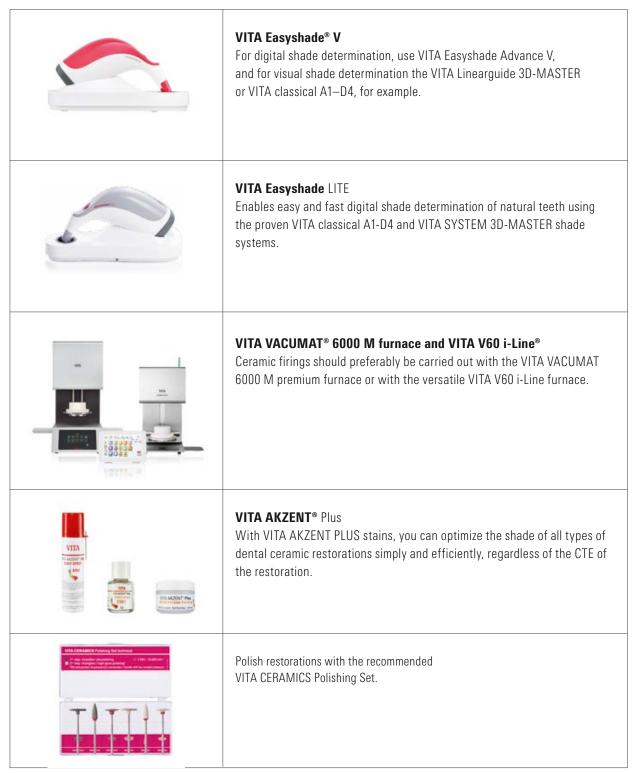
VITAVM.13 Modular and efficient assortment kit options



 $^{^{\}star}$ 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

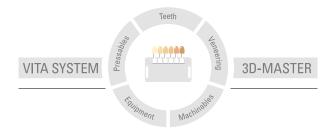
VITAVM.13 All from one experienced and competent partner



For more information visit www.vita-zahnfabrik.com

VITA VM 13 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 and this results in damage. The VITA Modulbox is not necessarily a component of the product. Date of issue of this information: 2024-04

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

VITA Zahnfabrik has been certified and the following products bear the mark

C € 0124

VITAVM⊗13

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

MD Rx Only



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