

# VITAVM<sup>®</sup>.CC

## Working Instructions



VITA shade determination

VITA shade communication

VITA shade reproduction

VITA shade control

Date of issue: 12.16

VITA shade, VITA made.

**VITA**

Filler-free cold-curing polymer resin for extraoral applications.  
Available in VITA SYSTEM 3D-MASTER and VITA classical A1–D4 shades.

Data – facts	3
Application area	3
BASIC layering	4
Classification tables and additional materials	8
Product lines	10
Notes	11

### Technical data

Physical properties*	Unit of measure	Value
Flexural strength	MPa	83
Elastic modulus	MPa	2100
Water absorption	µg/mm <sup>3</sup>	18
Solubility	µg/mm <sup>3</sup>	2

\* ISO 10477 / EN 27491 / ISO 7491 / further tests  
 The technical / physical values specified are typical measurement results and are based on samples compiled in-house and on in-house measuring instruments.

The values determined are based on samples that were compiled in accordance with the exact mixing ratio. If the mixing ratio is not strictly observed, the values may vary.

### Polymerization in a pressure pot (recommended)

Polymerization time: 10 minutes  
 Water temperature: 40°C  
 Pressure: 2–2.5 bar

### Polymerization without a pressure pot

Polymerization time: approx. 10 minutes, depending on the room temperature

## VITAVM<sup>®</sup>CC Application area

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VITA VM CC is the ideal filler-free cold-curing polymer resin for extraoral applications. (Type 1 per ISO 10477)

#### Indication:

- Fabrication of temporary crowns and bridges
- Cementation of VITA acrylic teeth, e. g. to model casts
- Repairs
- Coverage of jointed prostheses in the case of combined work

#### Contraindications:

- Definitive veneers

For coverage of metal frameworks, light-curing VITA VM LC OPAQUE is recommended.

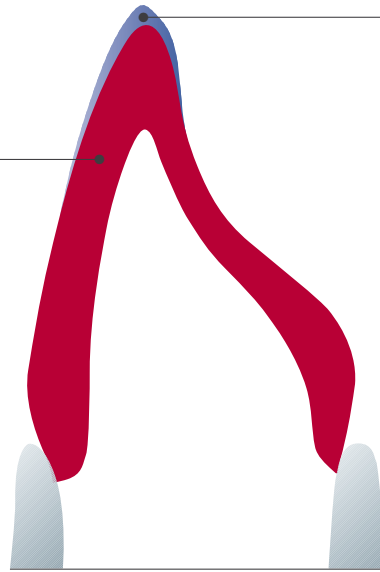
For long-term temporaries with or without a metal framework, the use of VITA VM LC is recommended.

The temporary is an important part of the treatment process that involves patient restorations comprising fixed dental restorations. It essentially serves to provide protection for the prepared teeth and for temporary restoration of esthetics and function. When used correctly, temporaries also offer a lot more: with the help of temporaries, the optimum final restoration design can be specifically prepared. Particularly in the case of anterior restorations, corrections can already be performed using the temporary with regard to esthetics, phonetics and function. A temporary also facilitates patient acceptance of the restoration as patients can become accustomed to the new situation at an early stage. VITA VM CC plays an important role in all of these aspects. With VITA VM CC, satisfied patients can enjoy natural esthetics while still wearing a temporary.

VITA VM CC BASE DENTINE



VITA VM CC ENAMEL



VITA VM CC BASIC layering is comprised of two materials: VITA VM CC BASE DENTINE and ENAMEL.

With these two layers, the user can create a temporary restoration that offers a natural appearance. For optimum shade reproduction, as well as for sufficient stability, a minimum layer thickness of 0.5 mm must be observed.



### Modeling the wax-up

The wax-up serves as a base for the temporary. The modeled tooth shape should already correspond as closely as possible to the planned restoration so that esthetics and function can already be verified in the patient's mouth in advance using the temporary. The function is already verified and corrected in the articulator using the wax-up. In the case of bridges, it is recommended that the connector surfaces between the crowns and the bridge pontics are designed to be as large as possible.



⚠ **Note:** An anatomically similar model is very useful as a template for modeling the wax-up in order to transfer the typical features of the tooth shape in each case. A working model without saw cuts is recommended.

Fabricate a silicone key for subsequent pouring.



The silicone that is used must support very fine detail and offer sufficient hardness and dimensional stability.

Remove the silicone key carefully and boil out the wax-up from the model.



Blow the model dry and block any undercuts using wax.

Then immerse the model in water for 5 minutes and coat sufficiently with low-viscosity plaster-acrylic insulation (alginate insulation). Alternatively, the VITA VM LC SEPARATOR can also be used. Please adhere to the working instructions.

⚠ **Note:** The interspace varnish that has been used can be dissolved using VITA VM CC material.



Reduce the palatal silicone key using the scalpel and cut sluice channels. Using VITA VM CC, fix the silicone key securely to the model for pouring.



**Mixing**

The powder and liquid are mixed in a silicone bowl. VITA VM CC must be mixed in liquid form. Depending on the room temperature, a smaller or larger amount of LIQUID is used for this purpose.



**Mixing ratio**

A large measuring spoon of VITA VM CC powder (approx. 0.23 g) is mixed with 4 drops (approx. 0.13 g) of VITA VM CC LIQUID. (reference value)



Once the material has been mixed evenly, it has a doughy consistency and can be processed following an appropriate expansion time (approx. 1 minute). The processing range is approx. 4 – 5 minutes, depending on the room temperature.



Streaks and bubbles can be avoided by observing the correct mixing ratio and by evenly mixing using the instrument along the base of the mixing container.



Pour the prepared VITA VM CC BASE DENTINE into the silicone key.



**Polymerization:**

Polymerization in the curing pressure pot improves the material properties and is recommended, however, it is not required for curing VITA VM CC.

**Polymerization in the pressure pot:**

40°C water temperature,  
2–2.5 bar pressure, 10 minutes



In order to create space for the enamel, the BASE DENTINE must be reduced in accordance with the layering pattern. For this purpose, mill the teeth gently on the incisal surface and apply mamelons. Cross-cut carbide milling tools are used for milling.

The silicone key is used to support verification.



If the restoration is created over the course of several polymerization steps, mill the surface using carbide milling tools (15,000 rpm) ...



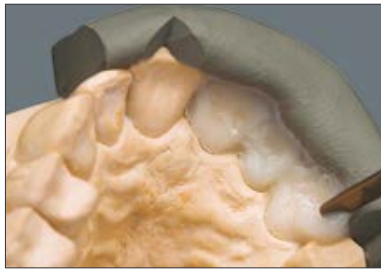
... and then coat with VITA VM CC LIQUID.

Apply the material to be supplemented using an instrument and polymerize.



Then coat the BASE DENTINE with LIQUID.

Using an instrument, partially apply the prepared ENAMEL material to the reduced bridge, and add some material inside the labial half of the matrix.



Place the matrix precisely onto the model and remove excess material. Fix the matrix securely to the model.

Then repeat polymerization (for more information, see page 7).



Finishing and corrections to the shape are carried out using carbide milling tools at a speed of 15,000 rpm.



Then pre-polish the restoration.



The final high-gloss polish can be achieved perfectly using a wool or leather buffing wheel at a speed of 5,000 rpm.



Fit the temporary to the saw-cut model.

The completed temporary.



The classifications given below are only intended as reference values!

VITA SYSTEM 3D-MASTER shades	ENAMEL
0M1	ENL
1M1	ENL
2L1.5	ENL
2M1	ENL
2M2	ENL
2M3	ENL
3L1.5	ENL
3L2.5	ENL
3M1	ENL
3M2	ENL
3M3	ENL
3R1.5	ENL
3R2.5	ENL
4L1.5	END
4M2	END
5M1	END

VITA classical A1–D4 shades	ENAMEL
A1	ENL
A2	ENL
A3	ENL
A3.5	END
A4	END
B2	END
B3	END
B4	END
C1	END
C2	END
C3	ENL
C4	ENL
D2	END
D3	END
D4	END

<b>VITAVM®CC EFFECT LINER</b> – For shade intensification of the tooth-neck area – Can be used for universal support and intensification of the base shade	EL2	cream	beige
	EL3	tabac	brown
	EL4	golden fleece	yellow
	EL5	papaya	orange
	EL6	sesame	green-yellow
<b>VITAVM®CC WINDOW</b> – Transparent material for individual characteristics	WIN	transparent	



VITAVM®CC BASIC KIT 16-COLOR**		
BASIC assortment for BASIC layering		
Quantity	Content	Material
16	30g	BASE DENTINE*
2	30g	ENAMEL ENL, END
1	30g	WINDOW WIN
1	100 ml	VITA VM CC LIQUID
1	–	Measuring spoon
1	–	VITA Toothguide 3D-MASTER
1	–	Working Instructions

\* Following shades: 0M1, 1M1, 2L1.5, 2M1, 2M2, 2M3, 3L1.5, 3L2.5, 3M1, 3M2, 3M3, 3R1.5, 3R2.5, 4L1.5, 4M2, 5M1  
 \*\* Also available as VITA VM CC BASIC KIT classical in the VITA classical shades A1-D4 (without B1)







VITAVM®CC BASIC KIT 5-COLOR*		
Small basic product line for BASIC layering		
Quantity	Content	Material
5	30g	BASE DENTINE 1M1, 2M2, 3M2, 3R2.5, 4M2
2	30g	ENAMEL ENL, END
1	30g	WINDOW WIN
1	30 ml	VITA VM CC LIQUID
1	–	Measuring spoon
1	–	VITA Toothguide 3D-MASTER
1	–	Working Instructions




\* Also available as VITA VM CC BASIC KIT SMALL classical with the following 6 shades: A1, A2, A3, A3.5, B3, D3



VITAVM®CC PROFESSIONAL KIT		
For natural effects and characteristics		
Quantity	Content	Material
5	30g	EFFECT LINER EL2–EL6

The following products require hazard identification:		
<p><b>VITAVM<sup>®</sup>CC LIQUID</b>                      Contains methyl methacrylate.                      1,2-Ethanediol dimethacrylate,                      2-(2H-Benzotriazol-2-yl)-p-cresol,                      Tinuvin P)</p>	<p>Highly flammable liquid and vapor.                      Causes skin irritation.                      May cause allergic skin reactions.                      May cause respiratory irritation.</p>	    
<p><b>VITAVM<sup>®</sup>CC POLYMER- powder</b>                      (Contains dibenzoyl peroxide)</p>	<p>May cause allergic skin reactions.</p>	

Please refer to the safety data sheet for detailed information!

<p><b>Occupational safety,                      health protection</b></p>	<p>While work is in progress, wear suitable protective gloves / protective clothing / safety goggles.                      Only perform work under an extraction unit.                      Disposal in accordance with official regulations as hazardous waste.                      Keep away from ignition sources.</p>	  
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### Storage information

Do not store above 25°C. Do not expose to direct sunlight.

It is generally recommended to store VITA VM CC LIQUID under cold conditions. To ensure optimal storage of the LIQUID, it should be stored in the firmly sealed container in a suitable refrigerator at 5-10 °C. To adapt the LIQUID to room temperature, it should be removed from the refrigerator one hour before the use. The containers should not be opened before use!

### Explanation of the markings on the packaging

**LOT** Symbol for "Lot number"



Symbol for "Do not expose to direct sunlight."



Symbol for "Best used before the end of"



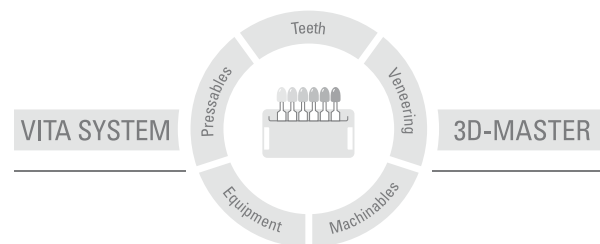
Symbol for „Date of manufacture“



Symbol for "Do not store above 25°C / 77°F."

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

With the unique VITA SYSTEM 3D-MASTER, all natural tooth shades are 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 which are not compatible or not authorized for use with our product. Furthermore, our liability for the correctness of this information is independent of the legal ground and, insofar as legally permissible, is limited to the invoiced value of the goods supplied excluding turnover tax. In particular, as far as legally permissible, we do not assume any liability for profit loss, for indirect damages, for consequential damages or for claims of third parties 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.

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After the publication of these working instructions any previous versions become obsolete. ihre Gültigkeit. The current version can be found under [www.vita-zahnfabrik.com](http://www.vita-zahnfabrik.com)

VITA Zahnfabrik has been certified in accordance with the Medical Device Directive and the following products bear the mark **CE** 0124:  
VITAVM<sup>®</sup>CC

# VITA

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