VITA ENAMIC® STAINS KIT

Working Instructions





VITA – perfect match.

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Information about VITA ENAMIC hybrid ceramic is available at

www.vita-enamic.de



ENAMIC crown, not characterized



ENAMIC crown after characterization

The VITA ENAMIC STAINS KIT contains 6 different stain powders and accessories for characterizing the shade of surfaces (staining technique) of restorations made of VITA ENAMIC hybrid ceramic with a dual network structure.

The stains in the set are cured by combining two matched hardener systems. Autopolymerization is initiated by mixing stain powder and liquid. Light curing at a **wavelength of 350 – 500 nm** stimulates and completes final polymerization. This dual hardener system ensures an extended processing time span and enables complete curing, even with extremely opaque shade/stain mixtures.

Once the VITA ENAMIC STAINS have been applied, the shade characterization surface is sealed using VITA ENAMIC GLAZE and homogenized, increasing the durability of the shade layer in the moist oral environment.

Indication

System for characterizing the shade of surfaces made of VITA ENAMIC hybrid ceramic with dual network structure.

Additionally, VITA ENAMIC STAINS can be used for conventional composite and resin materials.

Contraindication

Persons who are allergic to constituents of the VITA ENAMIC STAINS KIT.

Technical data

• Chemical composition

Product	Components
VITA ENAMIC STAIN	Cristobalite Dibenzoyl peroxide Dicyclohexyl phthalate
VITA ENAMIC STAINS LIQUID	Methyl methacrylate Aromatic urethane acrylate
VITA ENAMIC GLAZE	Methyl methacrylate, 2-propenoic acid, Reaction product with pentaerythrite Diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide



Conditioning the surfaces to be characterized

The surface of the ENAMIC restoration to be characterized needs to be rough and free from grease to optimize wetting and the retentive bond of the stain. Do not use on polished surfaces!

The surface should be conditioned in the following way:



Etch with 5% hydrofluoric acid gel such as VITA ADIVA CERA-ETCH as follows:

Using a small disposable brush, apply VITA ADIVA CERA-ETCH to the surfaces to be etched.

Etching time: 60 sec.



or sandblast with AI_2O_3 , max. 50 µm and a pressure of max. 1 bar.



Once the application time has come to an end, completely remove any residual acid from the etched surface by spraying with copious amounts of water, by cleaning thoroughly using a steam jet device, or by cleaning in an oil-free ultrasonic bath using distilled water. The whitish surface helps to recognize etched surfaces clearly.

Do not brush off, as this would lead to significant surface contamination.

Surfaces sandblasted with Al₂O₃ must also be cleaned thoroughly.



Then silanize the roughened surface, for example with VITA ADIVA C-PRIME. The surface must not be touched any longer.



Mixing the stain

Mix the respective stain powder with VITA ENAMIC STAINS LIQUID on the porcelain mixing plate using a glass or plastic spatula.

The mixing ratio can be varied as required as long as the mixture can be easily spread. Varying the mixture allows the intensity of the hue to be adjusted, creating results ranging from aqueous/transparent to opaque hues that offer full coverage.



Processing times

Processing time span of the final shade mixture: approx. 10 min

The processing time span can be extended by diluting with liquid. In the case of longer breaks between work, it is recommended that the mixing plate be covered using a lightproof lid in order to avoid premature polymerization of the mixture. Shade (stain) mixtures that have dried out can be prepared using liquid without affecting the quality.



Application of the stain

The stain is applied with the enclosed brush (size No. 1).

If required, intermediate polymerization can be performed after each individual layer of shade is applied.





Important:

Once staining has been completed and before sealing the surface using VITA ENAMIC GLAZE, the applied shade must be polymerized, as the shade layer could otherwise be inadvertently diluted or changed as a result of subsequent sealing using VITA ENAMIC GLAZE.

Intermediate polymerization of the applied stain layer*

• With dental curing lamps

Manufacturer	Unit	Program	Time
Ivoclar Vivadent	Bluephase C8	High (800 mW/cm²)	30 sec.
lvoclar Vivadent	Astralis 10	HIP (1,200 mW/cm²)	20 sec.
Ultradent	Valo LED	Xtra power (3,200 mW/cm²)	6 sec.

• With dental-technical polymerization units

Manufacturer	Unit	Time
Dreve	Polylux PT	5 min.
Hager & Werken	Speed Labolight	5 min.
Heraeus Kulzer	Heraflash	2 x 180 sec.

* For reasons of statutory product liability, no information can be provided for light curing units of other manufacturers. The quality of curing depends on the luminous intensity and the wavelength of light radiation, among others.



Important:

The staining brushes are cleaned using VITA VM LC CLEANER. Before further use, brushes must be dried thoroughly, e.g. on tissue, as residual CLEANER on the brush can contaminate stain mixtures, preventing them from being correctly polymerized.



Sealing the applied stain with VITA ENAMIC GLAZE

The use of VITA ENAMIC GLAZE is mandatory as it is used for sealing and homogenizing shade characterization surfaces and increases the durability of the shade layer in the moist oral environment.

Add a small drop of VITA ENAMIC GLAZE on the porcelain mixing plate and close the bottle again immediately.



Important:

The sensitive photoinitiator contained in VITA ENAMIC GLAZE can be activated by lighting at the work surface or by OR lighting.

Using the enclosed disposable microbrush applicator, quickly apply a single coat of VITA ENAMIC GLAZE to the entire restoration to create a thin and even layer. Avoid the formation of puddles!



Final polymerization of stain and VITA ENAMIC GLAZE

The varnish can be polymerized with all standard dental light-curing units with a spectral range of 350 - 500 nm. All coated surfaces must be completely polymerized.

• With dental curing lamps

Manufacturer	Unit	Program	Time ¹⁾
Ivoclar Vivadent	Bluephase C8	High (800 mW/cm²)	60 sec.
Ivoclar Vivadent	Astralis 10	HIP (1,200 mW/cm ²)	60 sec.
Ultradent	Valo LED	Xtra power (3,200 mW/cm²)	30 sec.

• With dental-technical polymerization units

Manufacturer	Unit	Time ¹⁾
Dreve	Polylux PT	10 - 15 min.
Hager & Werken	Speed Labolight	10 min.
Heraeus Kulzer	Heraflash	3 x 180 sec.

* For reasons of statutory product liability, no information can be provided for light curing units of other manufacturers. The quality of curing depends on the luminous intensity and the wavelength of light radiation, among others.



¹⁾Important:

Minimum times are indicated.

To avoid irritation of the mucous membrane, appropriate polymerization of VITA ENAMIC GLAZE must be ensured. The surface must not be sticky after curing.

Please make sure your polymerization unit features the intensity and wavelength required for complete curing.

Completed VITA ENAMIC crown with shade characterization



VITA ENAMIC® STAINS KIT			
Quantity	Content	Product name	
1	2 g	VITA ENAMIC STAIN, 1 white	
1	2 g	VITA ENAMIC STAIN, 2 corn	
1	2 g	VITA ENAMIC STAIN, 3 brown	
1	2 g	VITA ENAMIC STAIN, 4 khaki	
1	2 g	VITA ENAMIC STAIN, 5 blue	
1	2 g	VITA ENAMIC STAIN, 6 black	
1	20 ml	VITA ENAMIC STAINS LIQUID	
1	20 ml	VITA ENAMIC GLAZE incl. 25 microbrush disposable applicators	
1	50 ml	VITA VM LC Cleaner	
2	-	Brush No. 1	
1	-	Plastic mixing spatula, double-ended	
1	-	Porcelain mixing plate, black	

All products included in the product line are available separately.



VITA ENAMIC STAIN

Stain powder, which is mixed with VITA ENAMIC STAINS LIQUID. Even very opaque mixtures can be thoroughly cured by combining self-curing and light-curing (wavelength: 350 – 500 nm). Bottle cont. 2 g.



VITA ENAMIC STAINS LIQUID

Special liquid for mixing the VITA ENAMIC STAINS. Bottle cont. 20 ml.



VITA ENAMIC GLAZE

Transparent, highly abrasion-resistant light-curing varnish for sealing surfaces of restorations made of VITA ENAMIC which were individualized with VITA ENAMIC STAINS. Biofilm adhesion is reduced significantly thanks to the special surface energy.

Bottle cont. 20 ml incl. 1 pack of 20 microbrush disposable applicators.



VITA VM LC Cleaner

Solution for removing unpolymerized resin from the instruments. Bottle cont. 50 ml



Mixing plate

Porcelain, black glazed, with 11 recesses, incl. lid. Dimensions: 8.5 x 11 cm.



Plastic mixing spatula

White spatula, double-ended, for mixing VITA ENAMIC STAIN.



Brush No. 1

Red marten brush with black wooden handle.



Disposable brush tips

Brush tips for single use. Pack cont. 50 pieces.



Brush holder

White brush holder for disposable brush tips.



VITA ENAMIC Microbrush

Disposable applicators for the application of VITA ENAMIC GLAZE to the characterized restoration made of VITA ENAMIC. Pack cont. 25 pieces.



VITA ADIVA® CERA-ETCH

Hydrofluoric acid gel, 5%, for etching hybrid and silicate ceramics, red colored. Syringe of 3 ml or bottle cont. 6 ml.



VITA ADIVA® C-PRIME

Single-component silane bonding agent, bottle of 6 ml

VITA ADIVA CERA-ETCH	Caustic/Toxic
nydrofluoric acid ceramic tching gel)	For extraoral use only!
	Contains hydrofluoric acid. Toxic if swallowed. Fatal in contact with skin. Causes severe skin burns and damage to eyes. Harmful by inhalation. Wear protective safety goggles / protective gloves / protective clothing. Keep locked up. If swallowed, call Toxicological Information Center immediately and provide safety data sheet. In case of contact with clothing / skin, remove contaminated clothing immediately and rinse with copious amount of water. Specific measures, see safety data sheet. In case of contact with eyes, rinse with water for a few minutes and consult a doctor/Toxicological Information Center. This material and its container must be disposed of as hazardous waste.
ENAMIC STAIN	Contains cristobalite, CAS:14464-46-1
	Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.
	Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye and face protection. Wash thoroughly after use. When using do not eat, drink or smoke. In case of skin irritation or rash: seek medical advice/consult a doctor. Dispose of contents/container in accordance with local/ regional/national/international regulations.
A ENAMIC STAINS	Contains methyl methacrylate, CAS: 80-62-6 Aromatic urethane acrylate
	Highly flammable liquid and vapor. Causes skin irritation. Causes severe eye irritation. May cause allergic skin reactions. May cause respiratory irritation.
	Keep away from heat/sparks/open flame/hot surfaces. No smoking. Use explosion-proof electrical equipment/ventilation systems/ illumination. IN CASE OF CONTACT WITH THE SKIN (or hair): Remove/take off all
	 contaminated clothing immediately. Rinse skin with water/shower. IN CASE OF CONTACT WITH EYES: Rinse carefully with water for some minutes. Remove contact lenses if worn and easy to do so. Continue rinsing. Keep locked up. Dispose of contents/container in accordance with local/regional/ national/international regulations.

VITA ENAMIC GLAZE	Contains methyl methacrylate 2-propenoic acid, reaction product with pentaerythrite Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide Highly flammable liquid and vapor. Health hazard. Suspected of damaging fertility or the unborn child. Causes skin irritation. Causes severe damage to eyes. May cause allergic skin reactions. May cause respiratory irritation. Harmful to aquatic organisms with long-term adverse effects. Keep away from heat / sparks / open flame / hot surfaces. No smoking. Use explosion-proof electrical equipment/ventilation systems/illumination. IN CASE OF CONTACT WITH THE SKIN (or hair): Remove/take off all contaminated clothing immediately. Rinse skin with water/shower. IN CASE OF CONTACT WITH EYES: Rinse carefully with water for some minutes. Remove contact lenses if worn and easy to do so. Continue rinsing. Keep locked up. Dispose of contents/container in accordance with local/ regional/national/international regulations.	
VITA ADIVA C-PRIME (Silane bonding agent)	Highly flammable liquid and vapour. Keep away from heat/ sparks/open flames/hot surfaces. No smoking.	
VITA VM LC CLEANER	Highly flammable liquid and vapor.	

Protective clothing	When working with the product, wear suitable safety goggles / face protection, gloves and safety clothing.	
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The respective safety data sheets can be downloaded at www.vita-zahnfabrik.com



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 (culp an icontrahendo, 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 information: 06.18

Manufactured by

VITA ENAMIC® STAIN, VITA ENAMIC® STAINS LIQUID, VITA ENAMIC® GLAZE:

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Innovation MediTech GmbH has been certified in accordance to the Medical Device Directive and the following products bear the CE mark:

VITA ENAMIC® STAIN VITA ENAMIC® STAINS LIQUID VITA ENAMIC® GLAZE

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Sales

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