## VITA AKZENT ${ }^{\text {® }}$ LC

Instructions for use I Full version


Date of issue: 2022-08

VITA - perfect match.
VITA

The composite stain system: versatile, multifaceted, precise detailing.


Dear Customers,

Congratulations and thank you for choosing the VITA AKZENT LC stain system!

VITA AKZENT LC is a highly esthetic composite stain/glaze system used for characterizing all indirect restorations made of composite, polymer and hybrid ceramic. It enables detailed effect reproduction, as well as reliable shade corrections.

To process VITA AKZENT LC safely and simply, read these instructions carefully before the first use.
We hope you enjoy VITA AKZENT LC and achieve esthetic results!

Your VITA Product Management Team

Explanation of symbols:
System/technology info
D Please note
(1) Process
(目) Note
( Note
(a) Tips
(曾) Links/Tutorials

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1. Material system/processes
1.1 Explanations - Material System

(9) Note:

- What? VITA AKZENT LC are light-curing composite stains for reproducing individual shade effects and applying shade corrections.
- What for? The stains are universally suitable for extraoral characterization of dentures made of hybrid ceramic, CAD/CAM and veneering composites, denture bases, 3D-print acrylic polymers and prefabricated teeth, and can be used for internal characterization with the veneering technique.
- With what? The stain/glaze system includes 14 multifaceted effect stains, four glazing chroma stains (for each shade system) and a glaze paste for surface sealing.
1.2 Process steps for external characterization


* For highly filled CAD/CAM composites, such as Cerasmart (GC)
$(8$
Note:
- VITA ADIVA CERA ETCH is recommended for etching with $5 \%$ hydrofluoric acid gel.
- VITA ADIVA C-PRIME is recommended for silanizing.
- Sandblasting with $\mathrm{Al}_{2} \mathrm{O}_{3}$

1．3 Process steps for internal characterization with the veneering technique


## 2. Pretreatment

### 2.1 Overview - Pretreatment steps, according to material



[^0]1. 2.2 Pretreatment of hybrid ceramic


Note:

- The surface of the VITA ENAMIC hybrid ceramic restoration to be characterized needs to be rough, free from grease and dry to ensure wetting and the retentive bond of the stain.
- For etching, apply $5 \%$ hydrofluoric acid gel (e.g., VITA ADIVA CERA-ETCH) to the surfaces to be etched using a brush applicator or a disposable brush.
- Once the application time is complete, remove any residual acid 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.
I. Please note:
- Always wear gloves and safety glasses when etching.
- Observe precautionary measures/safety data sheets (item 5.7)!
- Do not brush off hydrofluoric acid, since this will contaminate the surface.
- Do not touch the etched surface, since this will contaminate the etching pattern.
. ヨ. Links/Tutorials:
- Learn more in tutorial videos: www.vita-zahnfabrik.com/tutorial/akzentlc/all/ifu/etch

3. Characterization
3.1 Overview - EFFECT STAINS


EFFECT STAINS

| Shades | Area of application |
| :--- | :--- |
| Fhite | For the imitation of enamel stains, enamel cracks and lime stains caused <br> by dental fluorosis |
| Fream | For the imitation of enamel stains and lime stains caused by dental <br> fluorosis and for accentuating cusps and bulges imitation of dentine core, mamelon structures, abrasion areas <br> and cervical discoloration |
| sun | For the imitation of dentine core, abrasion areas and fissures |
| fusset | For increasing cervical chromaticity and for the imitation of mamelon <br> structures and discoloration in the neck area and abrasion areas |
| fissures and darkening of proximal areas |  |

Note:

- EFFECT STAINS are suitable for reproducing individual and specific shade accents and any natural shade characteristics.
- The stains can be mixed with GLAZE to reduce the chroma level.
- Subsequent coating with GLAZE is not absolutely necessary.
3.2 Overview - CHROMA STAINS
Fita classical A1-D4

P Note:

- CHROMA STAINS are glazing stains for specific control of the chromaticity (shade intensity) of the base material used to increase the chroma within a shade group. As a result, they are typically used over a large area.
- Like the EFFECT STAINS, CHROMA STAINS can also be used for individual and selective characterizations.
- Subsequent coating with GLAZE is not absolutely necessary.
3.3 Application examples - Effect Stains: Anterior teeth


Reproduction of enamel opacities (calcifications).


Reproduction of enamel cracks.


Intensification at the tooth neck.
3.3 Application examples - Effect Stains: Posterior teeth


Reproduction of fissures.


Reproduction of translucent cusps.
3.5 Exemplary staining patterns - EFFECT STAINS: Anterior teeth


Characterization of a juvenile anterior tooth.


Characterization of an aged anterior tooth.


3.6 Exemplary staining patterns - EFFECT STAINS: Posterior teeth



1) 3.7 External characterization with EFFECT STAINS
 tray.


Intermediate polymerization.


Use EFFECT STAINS to characterize fissures ...


5 Apply GLAZE for sealing.
( $)$ Note:

- Shake bottle well before use (for 10 seconds). The mixing ball must be clearly heard!
- Close bottles immediately after use.
- The included brushes included are recommended for applying the stains.
- Apply the stains in a thin layer.
- Subsequent coating with GLAZE is not absolutely necessary.
(3) Tip:
- Before characterization with the EFFECT STAINS, the rough surfaces of the restoration to be characterized can first be wetted with a thin layer of GLAZE to identify the base shade. Then polymerize GLAZE together with the EFFECT STAINS.
- The chroma of the stains can be reduced by adding GLAZE.
- Polymerize individual stain layers in steps.
(1) Please note:
- The processing time of the stains depends on the room temperature and exposure to light.
- Cover the mixing tray with the lightproof lid in order to avoid premature polymerization of the stains.
- Dispose of any unused polymerized stain.
- Close the bottles immediately after use.
- Dry the brush thoroughly after cleaning with CLEANER.
- CLEANER adhering to the brush prevents proper polymerization of the stain.
(当 Links/Tutorials:
- Learn more in tutorial videos: www.vita-zahnfabrik.com/tutorial/akzentlc/all/ifu/external

3．8 Internal characterization with EFFECT STAINS


Cut－back of a resin veneered anterior crown．


Intermediate polymerization．


2 Apply LIQUID，allow to act for 30 to max． 60 seconds and blow thinly with air．＊


Apply veneering resin（e．g．，VITA VM LC） to the polymerized stain layer．


Apply EFFECT STAINS to the conditioned surface．


Final polymerization．


Tip：
－After final polymerization and finishing，polish the characterized surface with a suitable polishing paste（such as Renfert Polish hybrid materials，for example）and a soft goat hair brush．Then use a dry cotton buff to achieve the final gloss．
－The VITA AKZENT LC EFFECT STAINS can be mixed with the VITA VM LC flow materials in a max．ratio of 1：10．
（．）Links／Tutorials：
－Learn more in tutorial videos now：www．vita－zahnfabrik．com／tutorial／akzentlc／all／ifu／internal

[^1]1 3.9 Shade corrections with CHROMA STAINS


| VITA classical A1-D4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| A | $\mathrm{A1} \rightarrow \mathrm{~A}_{2} \rightarrow \mathrm{A3} \rightarrow \mathrm{A3.5} \rightarrow \mathrm{A4}$ |  |  |  |
| B |  | $\mathrm{B} 1 \rightarrow \mathrm{B2} \rightarrow \mathrm{B3} \rightarrow \mathrm{B4}$ |  |  |
| $0$ |  |  | $\mathrm{C1} \rightarrow \mathrm{C2} \rightarrow \mathrm{C3} \rightarrow \mathrm{C} 4$ |  |
|  |  |  |  | $\mathrm{D2} \rightarrow \mathrm{D3}$ |

## Note:

- Apply CHROMA STAINS in an even layer. They are used to systematically intensify the chroma within a shade group.
- Subsequent coating with GLAZE is not absolutely necessary.
. B. Links/Tutorials:
- Learn more in tutorial videos: www.vita-zahnfabrik.com/tutorial/akzentlc/all/ifu/correctionc


Initial situation：poor shade match （2M1 instead of 2M2）．


Apply CHROMA STAIN M2（red yellow） to achieve the chroma level 2.


## VITA SYSTEM 3D－MASTER

| $\text { ( } \text { corn-yellow) }$ | $2 \mathrm{L1.5} \rightarrow$ | 2L2．5 | $3 \mathrm{~L} 1.5 \rightarrow 3 \mathrm{~L} 2.5$ |  |  | $4 \mathrm{~L} 1.5 \rightarrow 4 \mathrm{~L} 2.5$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\binom{\text { M2 }}{\text { red-yellow }}$ | $1 \mathrm{M} 1 \rightarrow 1 \mathrm{M} 2$ | $2 \mathrm{M} 1 \rightarrow 2 \mathrm{M} 2$ |  | $3 \mathrm{M1} \rightarrow$ 3M2 |  | $4 \mathrm{M} 1 \rightarrow 4 \mathrm{M} 2$ |  | $5 \mathrm{M} 1 \rightarrow 5 \mathrm{M} 2$ |  |  |
|  |  |  | $2 \mathrm{M} 2 \rightarrow 2 \mathrm{M} 3$ |  | $3 \mathrm{M} 2 \rightarrow 3 \mathrm{M} 3$ |  | 4M2 | $\rightarrow 4 \mathrm{M} 3$ | $5 \mathrm{M} 2 \rightarrow 5 \mathrm{M} 3$ |  |
| light－r | $2 \mathrm{R} 1.5 \rightarrow 2 \mathrm{R} 2.5$ |  | $3 \mathrm{R} 1.5 \rightarrow$ 3R2．5 |  |  | $4 \mathrm{R} 1.5 \rightarrow 4 \mathrm{R} 2.5$ |  |  |  |  |

Note：
－After final polymerization，polish the characterized surface with a suitable polishing paste（such as Renfert Polish hybrid materials，for example）and a soft goat hair brush．Then use a dry cotton buff to achieve the final gloss．

当 Links／Tutorials：
－Learn more in tutorial videos：www．vita－zahnfabrik．com／tutorial／akzentlc／all／ifu／correction3d
3. 3.10 Glazing with GLAZE


Add GLAZE into the mixing tray.


Apply GLAZE to the characterized restoration.



Final characterized and glazed crown.

9 Note:

- GLAZE is a transparent light-curing varnish for surface sealing.
- The EFFECT STAINS and CHROMA STAINS do not need to be coated with GLAZE.
- Use microbrush disposable applicators for the application of glaze.
- Apply GLAZE swiftly and without streaks.
- Close bottle immediately after use.


## 1 Please note:

- All surfaces must be completely polymerized and hard.

There must be no sticky surfaces.
(1) Tip:

- After final polymerization, polish the glazed surface with a suitable polishing paste (such as Renfert Polish hybrid materials) and a soft goat hair brush. Then use a dry cotton buff to achieve the final gloss.
- GLAZE can be added to reduce the shade intensity of the EFFECT STAINS.

目 Note:

- For information on polymerization, see pages 25-27.

4. Polymerization
4.1 System compatibility


Polymerization device.


Dental polymerization lamp
(1) Note:

- For polymerization of VITA AKZENT LC, a light-curing device is required with light sources emitting rays in the wavelength range of < $\mathbf{4 3 0} \mathbf{n m}$ ! This requirement is met by numerous common light-curing units that emit light in the wavelength range of 350 to 500 nm .
- Various light sources can be used, such as:
- Xenon flashlight bulbs
- LED lamps
- Halogen lamps.
- Fluorescent lamps are not recommended, since their heat emission is minimal.
- Light-curing devices require regular service to ensure their proper function.
- For fast and safe curing, temperatures of $60^{\circ} \mathrm{C}-80^{\circ} \mathrm{C}$ in the polymerization chamber must be ensured. Temperatures above $90^{\circ} \mathrm{C}$ must be avoided.


### 4.2 Recommended polymerization devices/lamps

| Dental-technical polymerization devices |  |  |  |
| :---: | :---: | :---: | :--- |
|  | Polymerization device | Polymerization time* |  |
| Shofu | Solidilite V | Note |  |

* The specified polymerization times are minimum times.
(I) Note:
- Dental-technical polymerization devices are preferable to dental hand lamps, as they ensure a much more even exposure of the object.

| Dental polymerization lamps |  |  |  |
| :---: | :---: | :---: | :--- |
| Company | Polymerization device | Polymerization time＊ | Note |
| Ivoclar Vivadent | Bluephase G2 | Four x 20 seconds | ＂High＂mode |
| Ultradent | VALO LED | Four x 20 seconds | ＂Standard＂mode． <br> The light cones of the two LEDs <br> must completely overlap－－＞ <br> a very small distance to the <br> restoration is required． |

＊The specified polymerization times are minimum times．

## I Please note：

－In order to ensure complete curing of VITA AKZENT LC，the polymerization devices must provide sufficient radiation intensity in the required wavelength range．
－Many dental hand lamps do not feature the wavelength range required for VITA AKZENT LC！ Please observe the instructions for use of the manufacturer of your device．
－To avoid irritation of the mucous membrane，appropriate polymerization of VITA AKZENT LC STAINS and GLAZE must be ensured．

目 Note：
－You can find the latest information on the recommended polymerization devices at：www．vita－zahnfabrik．com／akzentlc

（1）Recommended product combinations
－VITA AKZENT LC is suitable for extraoral characterization of dental restorations made of hybrid ceramic（VITA ENAMIC）， CAD／CAM composite（such as VITA CAD－Temp，for example），veneering composites（such as VITA VM LC），denture bases （made of VITA VIONIC BASE，for example），prefabricated teeth（such as VITAPAN，for example）and 3D－print acrylic polymers．


5．Technical data／information
5．1 Chemical composition

| VITA AKZENT LC | $\mathbf{W t \%}$ |
| :---: | :---: |
| Methyl methacrylate and multifunctional methacrylates | $30-40$ |
| Urethane（meth－lacrylates | $40-60$ |
| Silicon dioxide | $8-11$ |
| Ethyl－phenyl（2，4，6－trimethylbenzoyl）phosphinate | $2-6$ |
| Other | $<1$ |
| Pigments | $<2$ |

Patient target group：
－No restrictions

Intended user
－Dental professionals only：dentist and dental technician（Rx only）．

## 5．2 Indication overview

| VITA AKZENT LC |
| :--- |
| Approved for： |
| －Restorations made of hybrid ceramic（VITA ENAMIC） |
| －Restorations made of light－curing material（e．g．，VITA VM LC） |
| －Restorations made of CAD／CAM composites（e．g．，VITA CAD－Temp） |
| －Prefabricated teeth |
| －Denture bases（e．g．，VITA VIONIC BASE） |
| －Restorations and denture bases made of 3D－print acrylic polymers |

Intended purpose：
－VITA AKZENT LC products are dental materials for sealing or coating acrylics．

### 5.3 Contraindications

| VITA AKZENT LC |
| :--- |
| Not approved for: |
| - Intraoral use <br> $\circ$ In patients with allergies or sensitivities to the ingredients |

(9) Note:

- To avoid fast abrasion of the stain, VITA AKZENT LC should not be used at the occlusal contact points of restorations.


## I Please note:

- Successful outcomes with VITA AKZENT LC cannot be guaranteed in the following cases:
- inadequate polymerization devices with unsuitable wavelength/light intensity
- insufficient pretreatment of the restoration or poor condition of the material surface to be characterized


### 5.4 Storage information

(9) Note:

- Store VITA AKZENT LC at $4^{\circ} \mathrm{C}$ to $25^{\circ} \mathrm{C}\left(39-77^{\circ} \mathrm{F}\right)$.
- Storage in a refrigerator is recommended.
- Do not use after the expiration date.
- The products labelled with a pictogram for hazardous substances are to be disposed of as hazardous waste. Recyclable waste (such as attachments, paper and plastics) must be disposed of using appropriate recycling systems. If necessary, contaminated product residues should be pretreated in accordance with regional regulations and disposed of separately.


### 5.5 Symbol explanations

| Manufacturer <br> VITA Zahnfabrik |  | Manufacturing date |  |
| :--- | :---: | :--- | :--- |
| Shelf life | Protect from sunlight | Lot number (batch) | LOT |
| Storage temperature | REF | Medical device |  |
| Product number | $\boxed{\mathbf{R}}$ |  |  |
| See <br> Instructions for Use |  |  |  |

5.6 Safety at work/health protection

| Safety at work and |
| :--- | :--- | :--- |
| health protection | | When working with the product, wear suitable safety goggles/face protection |
| :--- |
| and light respiratory protection. |

5.7 Safety data sheets

VITA AKZENT LC EFFECT STAINS/CHROMA STAINS/GLAZE

| - Highly flammable liquid and vapor. |
| :--- | :--- | :--- |
| - Causes skin irritation. |
| - May cause allergic skin reactions. |
| - Causes serious eye damage. |
| - May cause respiratory irritation. |
| - Harmful to aquatic life with long-lasting effects |
| - Wear protective gloves/protective clothing/eye protection. |
| - Keep the container tightly closed. |
| - Protect from heat. No smoking. |

VITA ADIVA CERA-ETCH

|  | Caustic/toxic | - For extraoral use only! <br> - Contains hydrofluoric acid. <br> - Toxic if swallowed. <br> - Fatal in contact with skin. <br> - Causes severe skin burns and eye damage <br> - Harmful by inhalation. <br> - Wear safety goggles/protective gloves/protective clothing. <br> - Keep locked up. <br> - If swallowed, call the Toxicological Information Center immediately and provide safety data sheet. <br> - In case of contact with clothing/skin, remove contaminated clothing immediately and rinse with a copious amount of water. <br> - Specific measures, see safety data sheet. <br> - In case of contact with eyes, rinse with water for a few minutes and consult a doctor/Toxicological Information Center. <br> - This material and its container must be disposed of as hazardous waste. |
| :---: | :---: | :---: |

## I. Please note:

- Avoid contact of uncured material with the skin.
- Avoid contact of the material with clothing.
- VITA AKZENT LC is volatile and may cause respiratory irritation. Use the product in a well-ventilated room. Put the cap back on after use.

目 Note:

- Please refer to the corresponding safety data sheets for detailed information.
- The corresponding safety data sheets can be downloaded at www.vita-zahnfabrik.com/sds.



### 5.8 General notes on handling

目 Product safety:

- Information on reporting serious incidents in connection with medical devices, general risks associated with dental treatments, residual risks and (if applicable) short clinical safety and performance reports (SSCPs) can be found at htpps://www.vita-zahnfabrik.com/product_safety

5．9 VITA system solutions


[^2]
## WE ARE HAPPY TO HELP

More information about the products and processing is also available at www.vita-zahnfabrik.com

Hotline Sales Support
Mrs. Carmen Holsten and her team (Internal Sales Department) will be glad to assist you with orders or questions about delivery, product data and marketing materials.

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## VITA VENEERING \& STAINING SOLUTIONS -

For a lifelike play of shade and light in all facets of nature.


LIGHT CURING (LC)

## $>$ VITA AKZENT ${ }^{\text {® }}$ LC: <br> For reliable reproduction of all shade nuances

Universally applicable composite stains for natural and precise shade effects, accurate shade corrections and high shade/gloss retention.

You can find more information on VITA AKZENT LC at: www.vita-zahnfabrik.com/akzentlc


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: 2022-08

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 60124

VITA AKZENT ${ }^{\text {L }}$ LC, VITA VM ${ }^{\circledR}$ LC, VITA CAD-Temp ${ }^{\oplus}$, VITA ENAMIC ${ }^{\oplus}$

CERASMART® is a registered trademark of GC Dental Products Corp, Aichi, Japan.
The products/systems of other manufacturers mentioned in this document are registered trademarks of the respective manufacturers.

Rx only (only for professional use) MD $\square \mathbf{i}$

[^3]
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[^0]:    * These are only general recommendations for pretreatment. Depending on the type of material, the specific manufacturer's instructions must be observed.
    ** If no inhibition layer is present during internal characterization, apply VITA VM LC MODELLING LIOUID, allow to act for 30 to max. 60 seconds and blow thinly with air. Characterize subsequently.

[^1]:    ＊Necessary if no inhibition layer is present．

[^2]:    ＊Optional process step：does not apply to the fabrication of monolithic restorations．

[^3]:    CH REP
    VITA Zahnfabrik H. Rauter GmbH \& Co.KG, Bad Säckingen (Germany) Zweigniederlassung Basel c/o Perrig AG, Max Kämpf-Platz 1, 4058 Basel

