VITA

Instructions for Use

VITA LUMEX® UNIQUE

The liquid ceramic for simple 3D characterization and ultra-thin microlayering.

Veneering ceramics

VITA LUMEX® UNIQUE

One system. Unique possibilities.

Dear Customer,

We are pleased that you have chosen VITA LUMEX UNIQUE.

VITA LUMEX UNIQUE gives monolithic restorations their final touch – easily, quickly and effectively.

The Liquid Ceramic System consists of fluorescent, ready-to-use pastes that are used to create unique esthetics and three-dimensional depth effects. With just a few brush strokes, monolithic restorations are taken to a whole new level in no time.

To use VITA LUMEX UNIQUE safely and efficiently at all times, please read these instructions for use fully before the first use.

We wish you every success and esthetically beautiful results.

Your VITA team

Content overview

1. Indication range: Liquid Ceramic Pastes

VITA LUMEX® UNIQUE **materials overview**

COLOR pastes

VITA LUMEX® UNIQUE crystal-white 287 LUMIN	Increasing brightness value or accentuating ridges and cusp areas.*	
LUMIN TRANSLUCENT EFFECT	crystal-white	
VITA LUMEX® UNIQUE saffron 387 MAMELON	For replicating natural mamelons and the halo effect in the incisal area.*	
MAMELON EFFECT	saffron honey-melon	
VITA LUMEX® UNIQUE deep-blue 301 TRANSLUCENT	For creating natural translucent effects, greater depth and reducing brightness.*	
TRANSLUCENT EFFECT	deep-blue midnight foggy-grey lilac	
VITA LUMEX® UNIQUE copper 304 TRANSLUCENT	For intensifying the cervical area and imitating intense mamelon structures. Also suitable for replicating discoloration in the interdental area and abraded areas.*	
TRANSLUCENT EFFECT	copper	
VITA LUMEX® UNIQUE lemon 307 TRANSLUCENT	For mixing and for effects in the tooth and gingival areas.	
TRANSLUCENT EFFECT	lemon deep-red	
VITA LUMEX® UNIQUE khaki 305 TRANSLUCENT	For replicating dark enamel defects, fissures, nicotine stains and discoloration in the neck area and on the incisal edges. For intensifying the proximal areas and neutralizing reddish tooth colors.	
TRANSLUCENT EFFECT	khaki	

*Examples and suggestions are provided for reference purposes only. The pastes are applied according to their intended purpose and the desired effect.

EFFECT and CHROMA pastes

VITA LUMEX® UNIQUE white 320 HIGHLIGHTING	For replicating chalk-colored cusp tips, enamel cracks, calcium spots and accentuating cusps and ridges. To increase the brightness value.*	
HIGHLIGHTING EFFECT	white	

VITA LUMEX® UNIQUE brown 322 HIGHLIGHTING	For replicating dark fissures and enamel defects, incisal discolorations and dark approximal areas.	
HIGHLIGHTING EFFECT	brown	

VITA LUMEX® UNIQUE black 323 HIGHLIGHTING	To decrease the brightness value, for replicating intense translucency and darkening other colors.*	
HIGHLIGHTING EFFECT	black	

VITA LUMEX® UNIQUE red-brown (A) 330 CHROMA	For easy chrome adjustment or adjustment to the natural tooth color.**	
CHROMA		
VITA classical A1-D4 Shades	red-brown (A) · red-sun (B) · grey-brown (C) · grey-red (D)	
VITA SYSTEM 3D-MASTER Shades	corn-yellow (L) · red-yellow (M) · light-red (R)	

VITA LUMEX® UNIQUE nectarine 354 EFFECT GINGIVA	For replicating natural gingival effects. Tip: These shades can also be used for minimal effects in the tooth area.	
EFFECT GINGIVA	pale-papilla** · light-rose** · nectarine** · deep-pink** · deep-purple**	

*Examples and suggestions are provided for reference purposes only. The pastes are applied according to their intended purpose and the desired effect.

**non-fluorescent

1. Indication range: Liquid Ceramic Pastes

VITA LUMEX® UNIQUE **materials overview**

TEXTURE pastes

VITA LUMEX® UNIQUE pink 396 TEXTURE GINGIVA	Ultra-thin microlayering: For minor changes in shape and structure with a thickness of approx. 0.1–0.2 mm, for color coverage and texturing of gingival areas.* Tip: TEXTURE clear + misty-rose for transparent surface structuring over existing effects and shading in the gingival area.*			
TEXTURE GINGIVA	light-pink** pink**		**TEXTURE**	clear** misty-rose**

VITA LUMEX® UNIQUE clear 344 TEXTURE	Small changes in shape and structure and the addition of contact points are possible. Ultra-thin microlayering with a thickness of approx. 0.1 - 0.2 mm for enhancing depth effects.**			
TEXTURE	ENAMEL light opal-sky			clear** misty-rose**

GLAZE

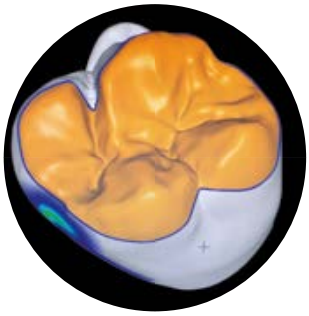
VITA LUMEX® UNIQUE 369 FLUO-GLAZE	For coating tooth and gingival areas. Can also be mixed.*			 
GLAZE PASTE	FLUO-GLAZE GLAZE (non-fluorescent)			
GLAZE POWDER	GLAZE (non-fluorescent)			

*Examples and suggestions are provided for reference purposes only. The pastes are applied according to their intended purpose and the desired effect. **non-fluorescent

2. Preparation and general information

2.1 General information

1. Decision on which workflow to execute:
Depending on the workflow, you can work with or without the cut-back technique.



2. Adapt the digital design:

- **3D characterization without texture (one layer)**
  = no vestibular cut-back: fully developed vestibular surface and morphology, including full gingiva shaping (note: for occlusal characterization, a reduction of approx. 0.05–0.1 mm needs to be planned)
- **3D characterization with texture**
  - Micro cut-back (approx. 0.2 mm)
  - vestibular cut-back
  - occlusal cut-back
- **Mixed technique: cut-back**
  - from approx. 0.4 mm layer thicknes

2.2 Flexibility

All pastes are ready to use

Creamy, flowable EFFECT and CHROMA pastes

Stable and flexible TEXTURE pastes

Consistency straight from the container

Changing the consistency

All pastes can be easily diluted with the VITA LUMEX UNIQUE LIQUID supplied.

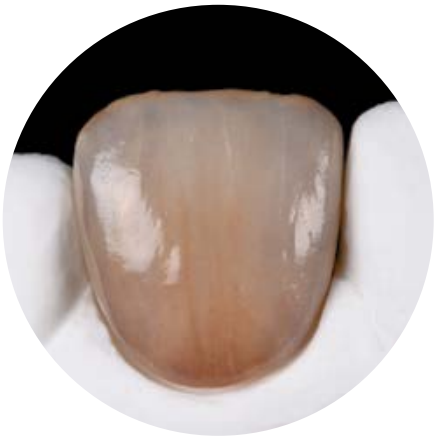
The consistency of all pastes, especially TEXTURE pastes, can be changed to a more paste-like consistency. For a more three-dimensional application of the TEXTURE pastes, it is recommended to blot them – e.g., with neutral paper towels – before or during application. Any material that has already been applied can be dried and hardened by holding it close to the open firing chamber of your furnace. This could be used, for example, to create a textured finish.

2.3 Adjustments to chroma and brightness values

Whether for correcting tooth shades or adapting to the VITA classical A1-D4 and VITA SYSTEM 3D-MASTER shade standards, CHROMA PASTE materials make it easy to intensify chroma in the corresponding shade groups.

Increase brightness and/or reduce chroma

Initial situation



Reduce brightness and increase chroma

Tips & Tricks

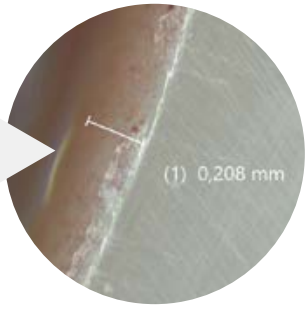
3. Structure / 4. Glaze

3.1 TEXTURE PASTE

TEXTURE PASTE or TEXTURE PASTE GINGIVA can be used for small changes to the shape and surface structure, as well as for adding contact points. It can either be applied evenly in a layer thickness of approx. 0.2 mm or in small quantities where required.

TEXTURE and TEXTURE GINGIVA pastes can be applied together with EFFECT and CHROMA pastes or glaze. No intermediate firing is necessary here, provided that the recommended layer thickness of max. 0.2 mm per firing is observed.

Layer thickness



Original microscopic view

Video tips on applying TEXTURE PASTE

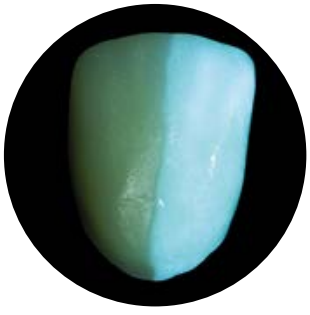
4.1 The perfect finish

When applied wet, the glaze may appear smoother, but the digitally designed monolithic surface texture will be clearly visible again after firing.

without glaze

with glaze

FLUO-GLAZE PASTE provides a natural finish that looks impressive both in daylight and under UV black light.



FLUO-GLAZE PASTE

FLUO-GLAZE PASTE

Video tips on applying GLAZE PASTE

5. Frame Preparation

5.1 Preparation of various frameworks

Lithium disilicate:
- Prepare according to the manufacturer's instructions, e.g., sandblast VITA AMBRIA with Al_2O_3 50 µm /1 – 1.5 bar.
- Clean in an ultrasonic bath with distilled water and/or carefully steam clean with a steam jet.

Zirconia:
- Prepare according to the manufacturer's instructions.
- Depending on the manufacturer's specifications, blast the sintered surface with aluminum oxide or glass beads 50 µm and max. 1 bar pressure.
- Clean in an ultrasonic bath with distilled water and/or carefully steam clean with a steam jet.

Feldspar:
- Prepare according to the manufacturer's instructions, e.g., the VITABLOCS surface can either be reworked with a diamond grinding instrument or blasted with Al_2O_3 50 µm/1 – 1.5 bar.
- Clean in an ultrasonic bath with distilled water and/or carefully steam clean with a steam jet.

Notes

The surface must be clean and free of grease before applying the materials.

Please note

- Do not pour any excess liquid out of the containers!
- Stir the VITA LUMEX UNIQUE pastes thoroughly with a metal-free spatula before each application.
- After removing the paste, ensure that the respective packaging is always completely closed again.
- Always use a clean brush.
- Do not mix pastes with water; use VITA LUMEX UNIQUE LIQUID instead.

Application tips

Tip

- Zirconia: Thorough steaming neutralizes the surface tension, which makes it easier to apply Liquid Ceramic.
- First, take the desired paste quantity and place it on a smooth surface (e.g., glass plate/mixing plate) before making any changes to the consistency.

Go to tips & tricks

5. Frame Preparation

5.2 Application tips/examples 3D characterization

Option 1:
After preparing the base structure, start applying the shade materials directly to the dry surface. Either apply the ready-to-use consistency or vacuum to firm up the consistency. Alternatively, you can add a little LIQUID (not watery!) to achieve the desired end results.

After the first characterization/glaze firing (see firing table, 9.1), either GLAZE/FLUO-GLAZE or TEXTURE pastes can be applied directly and another characterization/glaze firing (see firing table, see 9.1) can be carried out.

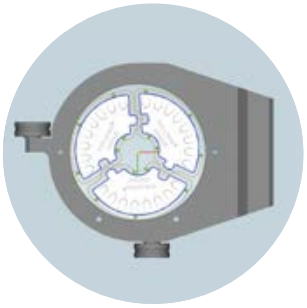
Option 2:
After preparing the base structure, start by applying a very thin coat of GLAZE or FLUO-GLAZE, then apply the pastes according to the intended use and desired effect. Use either the ready-to-use paste consistencies, reduce them or add a little liquid (not watery!) to achieve the desired end results.

After the first characterization/glaze firing (see firing table, see 9.1), either GLAZE/FLUO-GLAZE or TEXTURE pastes can be applied directly and another characterization/glaze firing (see firing table, see 9.1) can be carried out.

Option 3:
One-bake with the WOW technique (wet-on-wet technique). With this wet-on-wet technique, start by applying a coat of GLAZE or FLUO-GLAZE, just as you would when applying a final glaze. It is essential to have the ideal material consistency for this technique. Test the consistency as described in 6.5. Overlapping/layering the pastes automatically creates a 3D effect. See 6.5 WOW technique (wet-on-wet technique).

5.3 VITA LUMEX UNIQUE Color-Chart-Wheel

Useful tool for visualizing material colors: An STL file is available free of charge, allowing you to create your own CAD/CAM-supported shade template. Recommendation: Use white zirconia.



Prepare recesses as described in 5.1 and then apply the material. For firing tips, see video.

Tips and info for download Color-Chart-Wheel

6. Workflows – 3D characterization

6.1 BASIC Workflow – anterior tooth

Coloring in three zones:
Translucency – Brightness – Chroma

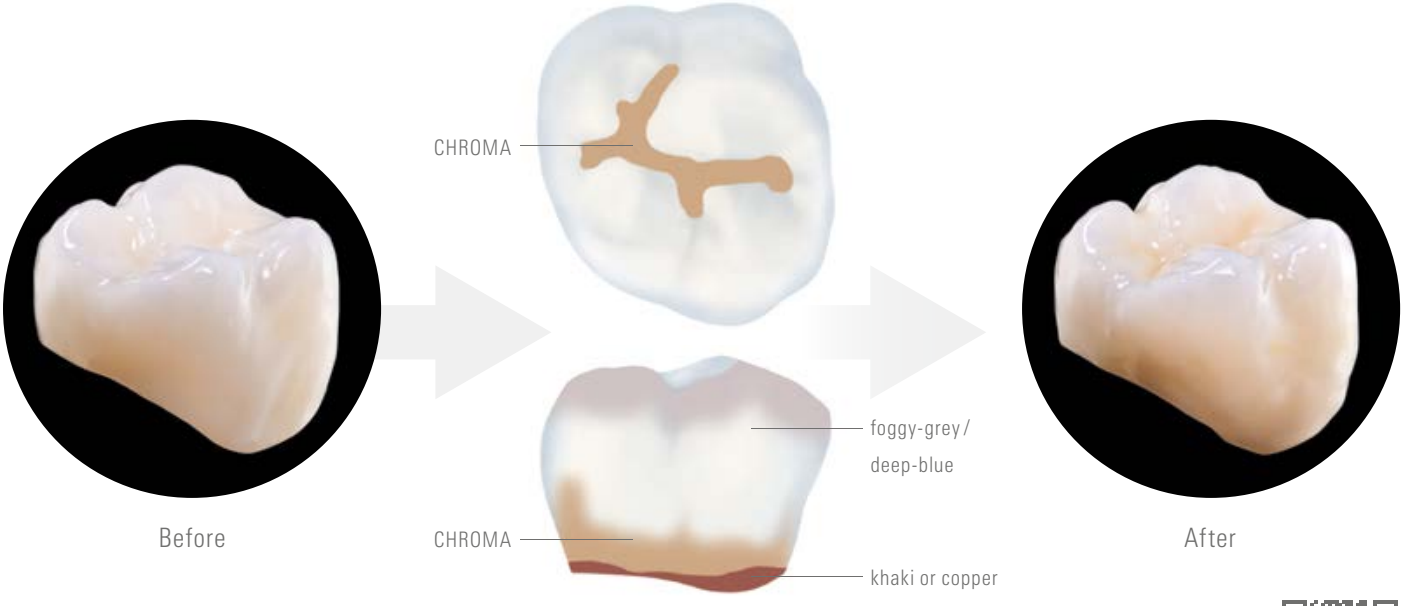
Follow the preparation and application tips on page 10.

Examples/materials:
- TRANSLUCENT EFFECT PASTE foggy-grey (midnight / deep-blue)
- CHROMA PASTE red-brown (A) / red-sun (B) / grey-brown (C) / grey-red (D) / corn-yellow (L) / red-yellow (M) / light-red (R)
- TRANSLUCENT EFFECT PASTE khaki or copper

6.2 BASIC Workflow – posterior tooth

Follow the preparation and application tips on page 10.

Examples/materials:
- LUMIN TRANSLUCENT EFFECT PASTE crystal-white
- TRANSLUCENT EFFECT PASTE foggy-grey (midnight / deep-blue)
- CHROMA PASTE red-brown (A) / red-sun (B) / grey-brown (C) / grey-red (D) / corn-yellow (L) / red-yellow (M) / light-red (R)
- TRANSLUCENT EFFECT PASTE khaki or copper



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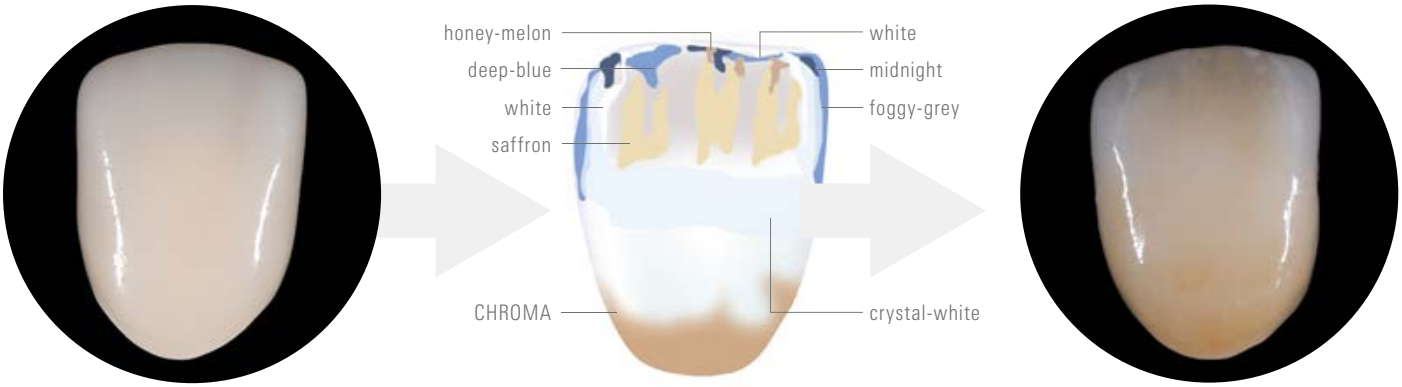
6. Workflows – 3D characterization

6.3 CREATIVE Workflow – anterior tooth

Coloring in three zones:
Translucency – Brightness – Chroma

Follow the preparation and application tips on page 10.

Examples/materials:
- TRANSLUCENT EFFECT PASTE foggy-grey, deep-blue, midnight, crystal-white
- HIGHLIGHTING EFFECT PASTE white
- MAMELON TRANSLUCENT EFFECT PASTE saffron
- CHROMA PASTE red-brown (A)



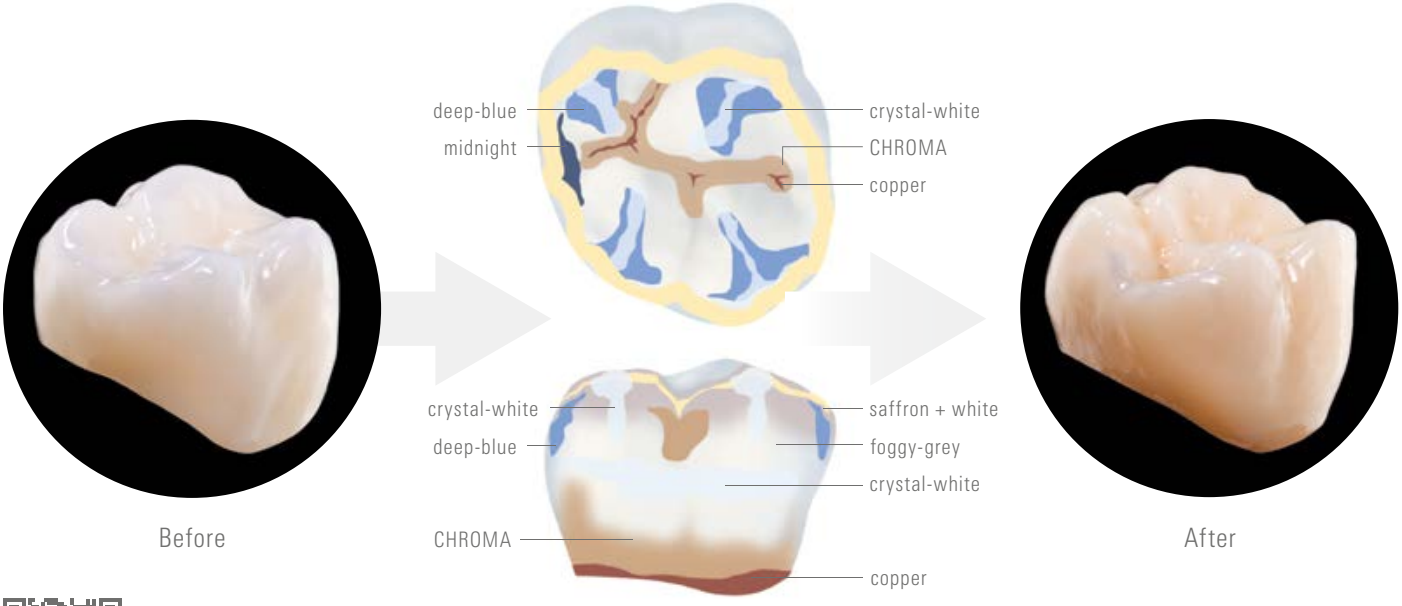
Before

After

6.4 CREATIVE Workflow – posterior tooth

Follow the preparation and application tips on page 10.

Examples/materials:
- LUMIN TRANSLUCENT EFFECT PASTE crystal-white
- TRANSLUCENT EFFECT PASTE foggy-grey, grey, deep-blue, midnight, crystal-white, CHROMA PASTE red-brown (A)
- MAMELON TRANSLUCENT EFFECT PASTE saffron
- HIGHLIGHTING EFFECT PASTE white



Before

After

Go to tutorial

Firing:

For information
on firing, see 9.1

6. Workflows – 3D characterization

6.5 One-bake with the wet-on-wet technique

With the wet-on-wet technique (WOW technique), start by applying a coat of GLAZE or FLUO-GLAZE, just as you would when applying a final glaze. It is essential to have the ideal color material consistency for this technique.

Tip

Test the ideal consistency of the color materials for the WOW technique: After mixing the materials in the pot, take a small amount of EFFECT paste and apply it to a smooth surface (e.g., glass plate). The mixture should remain standing like a small pointy hat with the tip slightly tilted to one side.

The special feature of this technique is that the pastes are overlapped or layered, automatically creating a three-dimensional effect.

- Apply FLUO-GLAZE PASTE/GLAZE PASTE to the entire anterior tooth crown and ensure that everything is covered in an even layer by gently rubbing it in.
- Apply any EFFECT or CHROMA shades one after the other to the FLUO-GLAZE/GLAZE PASTE and allow each applied shade to set in by briefly agitating the glaze before applying the next shade (maintain a paste-like consistency!).

Example anterior crown:

1 Apply FLUO-GLAZE PASTE – lightly agitate.

2 Apply CHROMA PASTE (work into the glaze) – lightly agitate.

3 TRANSLUCENT EFFECT foggy-grey (work into the glaze) – lightly agitate.

4 Place TRANSLUCENT EFFECT deep-blue – lightly agitate.

5 Place MAMELON EFFECT saffron – lightly agitate.

6 Place TRANSLUCENT EFFECT midnight – lightly agitate.
> Characterization/glaze firing (see firing table).

Note

When applied wet, the glaze can have a smooth surface, but the designed monolithic surface texture will be clearly visible again after firing.

Firing*:

Characterization/glaze firing VITA LUMEX® UNIQUE							
	Pre-dry °C	**→ min.**	**↗ °C / min.**	**Temp. approx. °C**	**→ min.**	**VAC**	**°C**
Single-tooth restorations and three-unit bridges	400	8.00	50	750	1.00	7.00	500
Wide-span bridges**	400	8.00	40	750	1.00	8.45	500
Full arch with gingival margin*	400	10.00	30	750	1.00	11.40	500

* The firing temperatures given are guidelines only. The firing results are influenced by several variables such as the brand, performance efficiency and age of the firing unit used.
** Depending on the weight of the restoration, it may be advantageous to extend the pre-drying time and/or reduce the heating rate.

Go to tutorial

7. Pink Esthetic – 3D characterization

7.1 BASIC GINGIVA Workflow

1 The initial situation can be coated directly with paste or moistened very lightly with glaze.

2 Apply EFFECT PASTE GINGIVA light-rose and leave parts in the alveolar area untouched.

3 Apply EFFECT PASTE GINGIVA deep-pink.

4 Apply TRANSLUCENT EFFECT PASTE deep-red to the wet colors already applied and spread so that delicate vessels are created.

5 Characterization of the alveolar arches with EFFECT PASTE GINGIVA pale-papilla.

6 Finished results

Optional: For additional information on the CREATIVE workflow, see step seven on the next page.

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7.2 Ultra-thin microlayering – CREATIVE GINGIVA Workflow: TEXTURE PASTE after BASIC Workflow

7 Optionally, a coat of TEXTURE PASTE clear or misty rose can be applied to achieve the ideal texture and depth without sanding, self-glazing.

8 Apply TEXTURE PASTE GINGIVA misty-rose to achieve minor shape and surface corrections.

9 To apply a stronger surface texture, you can first vacuum the surface with a neutral paper towel, for example.

10 Apply glaze to the tooth area, and if desired, work in a slight texture.
> VITA LUMEX UNIQUE > Characterization/glaze firing (see firing table).

11 Finished results.

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Firing*:

Characterization/glaze firing VITA LUMEX® UNIQUE							
	Pre-dry °C	**→ min.**	**↗ °C / min.**	**Temp. approx. °C**	**→ min.**	**VAC**	**°C**
Single-tooth restorations and three-unit bridges	400	8.00	50	750	1.00	7.00	500
Wide-span bridges**	400	8.00	40	750	1.00	8.45	500
Full arch with gingival margin*	400	10.00	30	750	1.00	11.40	500

* The firing temperatures given are guidelines only. The firing results are influenced by several variables such as the brand, performance efficiency and age of the firing unit used.
** Depending on the weight of the restoration, it may be advantageous to extend the pre-drying time and/or reduce the heating rate.

Tip

Polishing after firing is possible, e.g., with silicone polishers such as VITA CERAMIC Polisher und VITA CERA Polishing Paste.

Go to tips & tricks

7. Pink Esthetic – 3D characterization

7.3 Ultra-thin microlayering – CREATIVE GINGIVA Workflow: TEXTURE PASTE as a starting point

- Prepare the substructure according to the manufacturer's instructions. Clean the surface in an ultrasonic bath with distilled water and/or a steam jet.
- Mix the VITA LUMEX UNIQUE pastes thoroughly with a metal-free spatula before dispensing.

1 The initial situation can be coated directly with paste or moistened very lightly with glaze.

2 Apply a thin layer (0.1–0.2 mm) of TEXTURE PASTE GINGIVA to the gingival area.

3 Apply a thin layer to the surface and repeat until the entire gingival area is covered.

4 Position and smooth TEXTURE PASTE GINGIVA with a brush.

5 Characterization of the labial frenulum and alveolar arches with EFFECT PASTE GINGIVA pale-papilla.

6 Characterization below the pointed alveolar arches with EFFECT PASTE GINGIVA deep pink. In the area of the oral mucosa, fine arterial vessels can be simulated with TRANSLUCENT EFFECT PASTE deep-red and deep-blue.

7 To apply a stronger surface texture, either carefully vacuum with a paper towel beforehand or hold the restoration close to the firing chamber of a ceramic furnace until the surface appears paler (do not allow it to dry out completely!).

8 After incorporating the surface texture > VITA LUMEX UNIQUE characterization/glaze firing (see firing table).

9 Restoration after firing.

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Note

Thicker layer thicknesses (over approx. 0.2 mm) can lead to cracking or lifting without extending the pre-drying time.

Firing*:

Characterization/glaze firing VITA LUMEX® UNIQUE							
	Pre-dry °C	**→ min.**	**↗ °C / min.**	**Temp. approx. °C**	**→ min.**	**VAC**	**°C**
Single-tooth restorations and three-unit bridges	400	8.00	50	750	1.00	7.00	500
Wide-span bridges**	400	8.00	40	750	1.00	8.45	500
Full arch with gingival margin*	400	10.00	30	750	1.00	11.40	500

* The firing temperatures given are guidelines only. The firing results are influenced by several variables such as the brand, performance efficiency and age of the firing unit used.
** Depending on the weight of the restoration, it may be advantageous to extend the pre-drying time and/or reduce the heating rate.

Tip

Polishing after firing is possible, e.g., with silicone polishers such as VITA CERAMIC Polisher and VITA CERA Polishing Paste.

Go to tips & tricks

8. Creative Workflow

8.1 Mixed technique – Partial veneering/cut-back

Mix & Match with VITA LUMEX AC:

- A washbake is recommended for a good bond of VITA LUMEX AC to the zirconia framework.
- This process is not necessary for lithium disilicate frameworks, but can be carried out optionally, e.g., for internal characterization.

Washbake plus glaze and characterization with VITA LUMEX UNIQUE:

- For thin layers, VITA LUMEX UNIQUE GLAZE and/or FLUO-GLAZE can also be used for washbakes.
- To intensify the shade in the cervical area, for example, apply VITA LUMEX UNIQUE CHROMA pastes.
- For reproducing individual shade characteristics, for example, apply VITA LUMEX UNIQUE EFFECT and CHROMA pastes.
- This process is not necessary for lithium disilicate substructures, but can be performed as an option.

8.2 Labial/incisal cut-back

1 Prepare the substructure according to the manufacturer's instructions. Clean the surface in an ultrasonic bath with distilled water and/or a steam jet.

2 Apply FLUO-GLAZE PASTE. Characterization possible, e.g., with CHROMA PASTE, TRANSLUCENT EFFECT, HIGHLIGHTING EFFECT, MAMELON EFFECT, and LUMIN EFFECT in the glaze layer.
> Washbake VITA LUMEX AC.

3 Complete the crown shape, e.g., with VITA LUMEX AC ENAMEL light.
> Dentine firing VITA LUMEX AC (see firing table).

4 Results after the VITA LUMEX AC dentine firing.

5 Process (shape/function/surface) and clean (steam clean).

6 Apply VITA LUMEX UNIQUE FLUO-GLAZE or GLAZE, and if necessary, further characterize with EFFECT pastes.
> VITA LUMEX UNIQUE characterization/glaze firing (see firing table).

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8.3 Labial cut-back

1 Prepare the substructure according to the manufacturer's instructions. Clean the surface in an ultrasonic bath with distilled water and/or a steam jet.

2 Apply FLUO-GLAZE PASTE. Characterization possible, e.g., with CHROMA PASTE, TRANSLUCENT EFFECT, HIGHLIGHTING EFFECT, MAMELON EFFECT, and LUMIN EFFECT in the glaze layer.
> Washbake VITA LUMEX AC.

3 Complete the crown shape, e.g., with VITA LUMEX AC DENTINE and ENAMEL light.
> Dentine firing VITA LUMEX AC.

4 Results after the VITA LUMEX AC dentine firing.

5 Process (shape/function/surface) and clean (steam clean).

6 Apply VITA LUMEX UNIQUE FLUO-GLAZE or GLAZE, and if necessary, further characterize with EFFECT pastes.
> VITA LUMEX UNIQUE characterization/glaze firing (see firing table).

Tip

VITA LUMEX UNIQUE EFFECT pastes can also be used during layering to intensify the effect. In this case, color fading compared to the original color is possible due to dilution.

Firing:

For information on dentine and glaze firings, see page 24.

Firing for VITA LUMEX AC washbake:

Recommended firing for zirconia substructures					
Pre-dry °C	**→ min.**	**↗ °C/min.**	**Temp. approx. °C**	**→ min.**	**VAC**
400	4.00	50	800	1.00	on

Recommended firing with lithium disilicate					
Pre-dry °C	**→ min.**	**↗ °C/min.**	**Temp. approx. °C**	**→ min.**	**VAC**
400	4.00	50	760	1.00	on

Go to tutorial

8. Creative Workflow

8.4 Mix & Match

1 Prepare the substructure according to the manufacturer's instructions. Clean the surface in an ultrasonic bath with distilled water and/or a steam jet.

2 Characterization of the tooth area with EFFECT pastes: foggy-grey, deep-blue, midnight, saffron, Chroma (R), nectarine, white, crystal-white.*

3 Optional: VITA LUMEX AC ENAMEL lightly dust/powder over the wet, characterized surface.
> Washbake VITA LUMEX AC.

4 Result after washbake.

5 Completed application of VITA LUMEX AC ENAMEL.
> Dentine firing VITA LUMEX AC.

6 Results after dentine firing (already ground).

7 After applying TEXTURE GINGIVA, EFFECT PASTE GINGIVA and texture finish (see chapter 7).
> VITA LUMEX UNIQUE characterization/glaze firing (see firing table).

8 Optional: Apply TEXTURE PASTE clear. (Final firing after gingiva firing, for an ideal texture without grinding).

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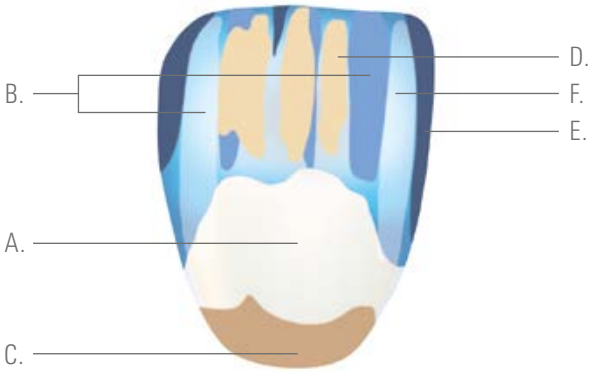
***Example: VITA LUMEX UNIQUE materials used in step 2, page 24:**

A. FLUO-GLAZE / GLAZE
B. TRANSLUCENT EFFECT foggy-grey & deep-blue
C. CHROMA PASTE (neck, body)
D. MAMELON EFFECT saffron / honey-melon
E. TRANSLUCENT EFFECT midnight
F. LUMIN TRANSLUCENT EFFECT crystal-white und HIGHLIGHTING EFFECT white

+ Apply VITA LUMEX AC ENAMEL light.



Firing VITA LUMEX UNIQUE:

Information on firing VITA LUMEX UNIQUE characterization/glaze firing (see firing table).

Firing for VITA LUMEX AC washbake:

Recommended firing for zirconia substructures					
Pre-dry °C	**→ min.**	**↗ °C / min.**	**Temp. approx. °C**	**→ min.**	**VAC**
400	4.00	50	800	1.00	on

Recommended firing with lithium disilicate					
Pre-dry °C	**→ min.**	**↗ °C / min.**	**Temp. approx. °C**	**→ min.**	**VAC**
400	4.00	50	760	1.00	on

Firing for VITA LUMEX AC dentine firing:

Recommended firing first dentine firing*					
Pre-dry °C	**→ min.**	**↗ °C / min.**	**Temp. approx. °C**	**→ min.**	**VAC**
400	6.00	50	760	1.00	on

* Applies for both zirconia and lithium disilicate substructures.

Note

When working with rotating instruments, we recommend using a fine grit diamond or stone. The surface can then be smoothed and polished to a high gloss using silicone polishers (e.g., VITA CERAMIC Polisher, VITA CERA Polishing Paste).

Go to tips & tricks

9. Technical data/information

9.1 Recommended firing*
3D characterization and ultra-thin microlayering

Characterization/glaze firing VITA LUMEX® UNIQUE							
	Pre-dry °C	→ min.	↗ °C/min.	Temp. approx. °C	→ min.	VAC	°C
Single-tooth restorations and three-unit bridges	400	8.00	50	750	1.00	7.00	500
Wide-span bridges**	400	8.00	40	750	1.00	8.45	500
Full arch with gingival margin**	400	10.00	30	750	1.00	11.40	500

* The firing temperatures given are guidelines only. The firing results are influenced by several variables such as the brand, performance efficiency and age of the firing unit used.
** Depending on the weight of the restoration, it may be advantageous to extend the pre-drying time and/or reduce the heating rate.

Tip

"10902D VITA LUMEX UNIQUE firing parameters for various ceramic furnaces" can be found here:

www.vita-zahnfabrik.com/lumex_unique

9.2 Recommended firing mixed technique with VITA LUMEX AC

VITA LUMEX® AC WASHBAKE with zirconia					
Pre-dry °C	→ min.	↗ °C/min.	Temp. approx. °C	→ min.	VAC
400	4.00	50	800	1.00	on

VITA LUMEX® AC WASHBAKE with lithium disilicate					
Pre-dry °C	→ min.	↗ °C/min.	Temp. approx. °C	→ min.	VAC
400	4.00	50	760	1.00	on

VITA LUMEX® AC 1. dentine firing*					
Pre-dry °C	→ min.	↗ °C/min.	Temp. approx. °C	→ min.	VAC
400	6.00	50	760	1.00	on

* Applies for both zirconia and lithium disilicate frameworks.

9.3 Recommended firing VITA LUMEX AC CORRECTIVE materials

Corrective firing with VITA LUMEX® AC CORRECTIVE							
Pre-dry °C	→ min.	↗ °C/min.	Temp. approx. °C	→ min.	°C ↘	→ min.	VAC
400	4.00	50	725	1.00	500*	–	on

Please note

- The user should consider this information only as a reference. If the surface quality or the degree of transparency or glaze does not correspond to the firing result that is achieved under optimum conditions, the firing procedure must be adjusted accordingly.
- The critical factors for the firing procedure are not the firing temperature indicated on the furnace display, but rather the appearance and the surface quality of the firing object after firing.
- To achieve an optimum firing result on multi-unit bridge substructures (especially with voluminous pontics), an extension of the heating time is recommended.

Explanation of Symbols							
Pre-dry °C	**→ min.**	**↗ °C / min.**	**Temp. approx. °C**	**→ min.**	**↘ °C**	**→ min.**	**VAC**
Start temperature	Pre-drying time in minutes, closing time	Temperature rise rate in degrees Celsius per minute	Final temperature	Holding time for endtemperature	Long-term cooling	Hold time for long-term cooling	With or without vacuum during the heating phase and final temperature holding phase

9.4 Technical/physical data

VITA LUMEX® UNIQUE		
Physical properties	**Unit of measure**	**Value**
Solubility in acids	µg / cm²	approx. 10
3-point flexural strength	MPa	approx. 100
Coefficient of thermal expansion (CTE)	10^{-6} K^{-1} (25-400°C)	approx. 8.7

9. Technical data/information

9.5 Chemical composition

Ceramic powder	Wt%
SiO_2	58–66
Al_2O_3	7–11
K_2O	6–9
B_2O_3	5–9
Na_2O	5–9
CaO	1–5
ZrO_2	< 5
Additional components	< 10

Chemical composition	Wt%	
	Paste	Powder
Ceramic powder	60–70	100
1,3-butandiol	25–35	–
more components	3–7	–

- The technical/physical values given are typical measurement results and refer to in-house manufactured samples and measuring instruments in the company.
- If samples are prepared using different methods and measured with different measuring equipment, other measuring results may be obtained.

9.6 Intended purpose

VITA LUMEX UNIQUE products are ceramic materials for dental treatments.

9.7 Patient target group

No restrictions.

9.8 Intended users

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

9.9 Indications

Indications:
Esthetic finalization of monolithic restorations made of (CTE-range approx. 9.0 to 10.5 x 10^{-6} K^{-1}*):

- Zirconia
- Lithium disilicate
- Feldspar ceramics

Characterization of ceramic partial and full veneers with suitable dental veneering ceramics** on the following framework materials (WAK range approx. 9.0 to 10.5 x 10^{-6} K^{-1}):

- Zirconia (partial and full veneering, e.g., with VITA LUMEX AC)
- Lithium disilicate (partial and full veneering, e.g. with VITA LUMEX AC)
- Titanium (grade 1-5) (full veneering, e.g., with VITA LUMEX AC)
- Feldspar ceramic (partial veneering, e.g., with VITA LUMEX AC)

9.10 Contraindications

- Substructures with unsuitable CTE values and material properties.
- Patients with allergies or sensitivities to the ingredients.
- Insufficient space available.

*According to ISO 6872, the CET range is subject to a possible deviation of up to ± 0.5 × 10^{-6} K^{-1}.
** To be found in document: 10887E VITA LUMEX UNIQUE – approved veneering ceramic

9.11 Symbol explanations

Manufacturer VITA Zahnfabrik		Manufacturing date	
Medical device		Shelf life	
For professionals only	Rx only	Product number	
Refer to instructions for use		Lot number (batch)	
Recycling symbol			

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:
www.vita-zahnfabrik.com/product_safety [1)].

The corresponding safety data sheets can be downloaded at **www.vita-zahnfabrik.com/SDS** [2)].
Products labeled with a hazardous substances pictogram must be disposed of as hazardous waste. Recyclable waste (e.g., accessories, 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.

1) 

2) 

9.12 Safety at work/health protection

Safety at work and health protection	When working with the product, wear suitable safety goggles/ face protection, gloves and safety clothing.	

* To be found in document: 10887E VITA LUMEX UNIQUE – approved veneering ceramic

Suitable solutions for processes.

Shade determination

VITA Easyshade V / VITA Easyshade LITE
or VITA Shade Guides

Framework completion

VITA YZ ZIRCONIA, VITABLOCS feldspar ceramic
or VITA AMBRIA lithium silicate ceramic

Veneering

VITA LUMEX AC

3D characterization and ultra-thin microlayering

VITA LUMEX UNIQUE Liquid Ceramic

Firing

VITA VACUMAT 6100 M
VITA SMART.FIRE ADVANCED

Polishing

VITA CERAMICS Polishing Sets
and VITA Polish Cera Polishing Paste

We are happy to help.

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Please note:
Our products must be used according to the instructions for use. We cannot be held liable for damages 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 application. 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.
Date of issue of these Instructions for Use: 2025-10

After publication of these Instructions for Use, any previous versions become obsolete. The current version in each case is available at www.vita-zahnfabrik.com

VITA Zahnfabrik is certified, and the following products bear the CE mark CE 0124:
VITA LUMEX® UNIQUE · **VITA LUMEX®** AC

The products/systems of other manufacturers mentioned in this document are registered trademarks of the respective manufacturers.

Rx only MD

Additional information:
10887 VITA LUMEX UNIQUE – approved veneering ceramic, see **VITA LUMEX®** UNIQUE
Download at www.vita-zahnfabrik.com

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For more information on VITA LUMEX UNIQUE,
simply scan the QR code.
www.vita-zahnfabrik.com/LUMEX_UNIQUE

VITA LUMEX® UNIQUE

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