

sagemax[®]

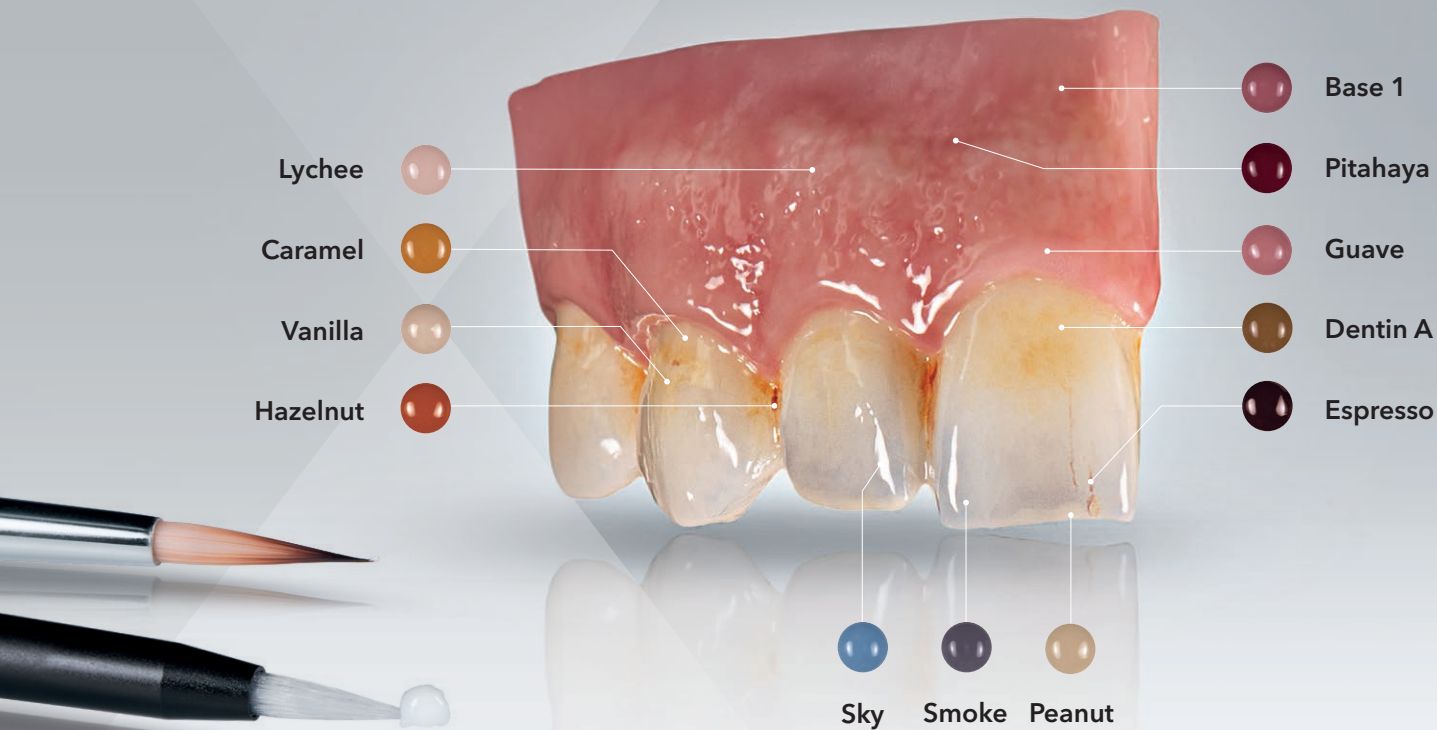
PAINT 3D

Quick Start Guide

sagemax.com



The only limit
is your imagination!



Paint 3D



UNIVERSAL COLORING SYSTEM

Paint 3D is a universal coloring system for the individual staining and glazing of dental ceramics in the CTE range from 9.4 to $17.5 \times 10^{-6}/K$. Ideally suited for milling, pressing and veneering ceramics – including zirconium oxide, lithium disilicate and other glass ceramics – Paint 3D offers a wide range of applications and maximum flexibility in everyday laboratory work.



3D EFFECT PASTES

The innovative 3D effect pastes open up new creative possibilities and give surfaces an impressive three-dimensional depth and texture. Whether for subtle accents or striking effects: These pastes make it possible to transform even the smallest details into realistic dental works of art.



EASY HANDLING

Thanks to their special consistency, the pastes can be applied and modeled effortlessly, making them ideal for demanding projects where precision and efficiency are paramount. Paint 3D supports time-saving workflows without compromising on esthetics or attention to detail – for professional results at the highest level.

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General information



Product description

Paint 3D are universal staining, glazing and texturing pastes for the characterization and glazing of ceramic materials in the CTE range of $9.4 - 17.5 \times 10^{-6}/K$ (25–500 °C).

Areas of application

Characterization and glazing of ceramic materials:

- › Zirconium oxide
- › Milling ceramics
- › Press ceramics
- › Veneering ceramics
(all-ceramics & metal-ceramics)



Framework preparation

Zirconium oxide (ZrO₂)

1. If absolutely necessary: Prepare the restoration with suitable grinding instruments (see Instructions for Use) at low pressure and low speed.
2. Optional: Blast the restoration with aluminium oxide (Al₂O₃) 25–70 µm at 1 bar pressure or 70–110 µm at 1.5 bar pressure.
3. Smooth the incisal and occlusal contact points and the basal side of the bridge connectors using rubber polishers.
4. Thoroughly clean the restoration with running water or the steam jet.
5. Dry the restoration.

Lithium disilicate (LS2) Press

1. Prepare the restoration using ceramic- and/or diamond-bonded grinding instruments at low pressure and low speed. Observe the Instructions for Use.
2. Blast restoration with Al₂O₃, 100 µm at 1 bar pressure.
3. Thoroughly clean the restoration with running water or the steam jet.
4. Dry the restoration.

Note:

Further information on framework preparation for lithium disilicate (LS2) CAD, leucite-reinforced glass-ceramic CAD and veneering ceramics can be found in the Paint 3D Instructions for Use.

Material properties

Technical data



Type

Low-fusing glass ceramic



Pastes

Self-glazing 3D effect pastes



CTE range

9,4 - 17,5 x 10⁻⁶/K



Applications

Zirconium oxide, Lithium-Disilicate, Veneering ceramics



Application techniques

Wet-in-Wet, Classic

Consistency

The pastes are pre-set to a ready-to-use consistency. Before application, they should be thoroughly mixed with a non-metallic spatula. The consistency can be individually adjusted with the Universal Liquid, and dried-out pastes can be refreshed with it.

Note:

Glaze Fluo must not be diluted when using the wet-in-wet technique.
The more the pastes are diluted, the lower their color intensity.



Self-glazing properties

All pastes contain the same glass as the glaze, enabling them to function as a glaze and exhibit self-glazing properties.

Note:

This only applies to undiluted pastes.

The result is an exceptionally smooth and uniform surface that preserves the underlying structure.



Fluorescence

All White Esthetics pastes exhibit varying levels of fluorescent properties in the wavelength range of 366 nm. The Pink Esthetics pastes do not fluoresce.



White Esthetics pastes

Pink Esthetics pastes



The intensity of the fluorescent properties varies depending on the color.

Material properties

Create new colors



1:1



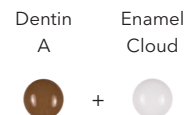
Increase the translucency



1:1



Increase the brightness



3:1



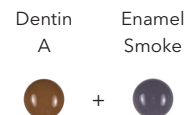
2:1



1:1



Decrease the brightness



3:1



2:1



1:1



Processing properties

All pastes can be effortlessly mixed and combined, providing limitless color options. Mixtures on page 26.

Create an individual filter and mix individually colored glazes

Glaze
Fluo



Glaze
Fluo



+

Dentin
A



5:1



Glaze
Fluo



+

Enamel
Smoke



5:1



Glaze
Fluo



+

Enamel
Cloud



5:1



Create colored texture pastes

Texture
& Glaze Fluo



+

Dentin
A



12:1



Glaze
Fluo



Glaze
Fluo



Glaze
Fluo



Glaze
Fluo

Note:

The Texture can be mixed with other pastes at a maximum ratio of 12:1. A stronger mixture may affect the firing result.

Material overview

White esthetics

Glaze & Texture



Product

Paint 3D
Glaze Fluo

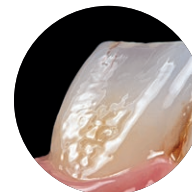
Paint 3D
Texture & Glaze Fluo

Pigment concentration

No color pigments

No color pigments

Application example



- › Glazing of teeth
- › Increasing the translucency of colors
- › Reducing the color intensity of colors
- › Mixing with other colors

- › Building up the tooth surface texture
- › Reproduction of contact points
- › Adaptation of the tooth shape
- › Mixing with other colors

Dentin



Paint 3D
Dentin **Bleach**

High



Paint 3D
Dentin **A**

High



Paint 3D
Dentin **B**

High



Paint 3D
Dentin **C**

High



Paint 3D
Dentin **D**

High



- › Adjustment of the BL dentin colors
- › Reinforcement of the chroma
- › Setting accentuations
- › Mixing with other colors



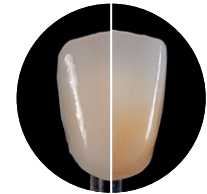
- › Adjustment of the A dentin colors
- › Reinforcement of the chroma
- › Setting accentuations
- › Mixing with other colors



- › Adjustment of the B dentin colors
- › Reinforcement of the chroma
- › Setting accentuations
- › Mixing with other colors










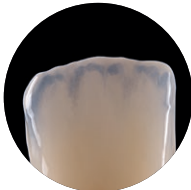
- › Adjustment of the C dentin colors
- › Reinforcement of the chroma
- › Setting accentuations
- › Mixing with other colors



- › Adjustment of the D dentin colors
- › Reinforcement of the chroma
- › Setting accentuations
- › Mixing with other colors

White esthetics

Enamel

				
Product	Paint 3D Enamel Cloud	Paint 3D Enamel Sky	Paint 3D Enamel Sea	Paint 3D Enamel Deep Sea
Pigment concentration	Low	Low	Low	Low
Application example				
	<ul style="list-style-type: none"> › Imitation of whitish areas, e.g. calcifications, large bright areas › Increasing the brightness value of other colors 	<ul style="list-style-type: none"> › Imitation of slightly bluish shimmering, translucent areas in the incisal region › Creating translucent-looking accentuations › Mixing with other colors 	<ul style="list-style-type: none"> › Imitation of bluish shimmering, translucent areas in the incisal region › Creating translucent-looking accentuations › Mixing with other colors 	<ul style="list-style-type: none"> › Imitation of strongly bluish shimmering, translucent areas in the incisal region › Creating translucent-looking accentuations › Mixing with other colors



Paint 3D
Enamel **Smoke**

Low



Paint 3D
Enamel **Shadow**

Low






- › Imitation of slightly grayish shimmering, translucent areas in the incisal region
- › Creating translucent-looking accentuations
- › Reducing the brightness value of other colors



- › Imitation of slightly violet shimmering, translucent areas in the incisal region
- › Creating translucent-looking accentuations
- › Mixing with other colors



White esthetics

	Effect		
Product	Paint 3D Effect Peach	Paint 3D Effect Peanut	Paint 3D Effect Apricot
Pigment concentration	Medium	Medium	Medium
Application example	 <ul style="list-style-type: none"> › Imitation of mamelons › Creating salmon-colored accents › Mixing with other colors 	 <ul style="list-style-type: none"> › Imitation of the halo effect › Creating cream-colored accents › Mixing with other colors 	 <ul style="list-style-type: none"> › Imitation of a natural transition to the gingiva › Creating reddish accents › Mixing with other colors



White esthetics

Intense Effect



Paint 3D
Intense Effect **Milk**

High



Paint 3D
Intense Effect **Vanilla**

High



Paint 3D
Intense Effect **Caramel**

High



Paint 3D
Intense Effect **Hazelnut**

High



Paint 3D
Intense Effect **Espresso**

High



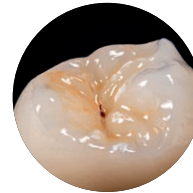
- › Creating intense white accents, e.g. calcifications, enamel cracks
- › Mixing with other colors



- › Creating intensive cream-colored accents, e.g. calcifications, enamel cracks, mamelons, halo effect
- › Mixing with other colors



- › Creating intensive gold-colored accents, e.g. occlusal, interdental cracks
- › Mixing with other colors



- › Creating intensive copper-colored accents, e.g. occlusal, interdental cracks
- › Mixing with other colors



- › Creating intense dark brown accents, e.g. caries
- › Mixing with other colors

Pink esthetics

Glaze & Texture

Product

Paint 3D
Glaze Gingiva

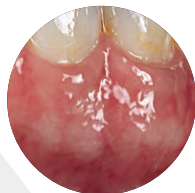
Paint 3D
Texture & Glaze Gingiva

Pigment concentration

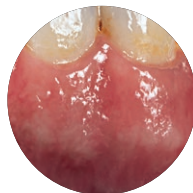
No color pigments

Very low

Application example



- › Glazing of gingival areas or teeth where fluorescence is not desired
- › Increasing the translucency of gingiva colors
- › Reducing the color intensity of gingiva colors



- › Building up the gingival surface texture
- › Mixing with other gingiva colors



Pink esthetics

Base



Paint 3D
Gingiva **Base 1**

High



Paint 3D
Gingiva **Base 2**

High



Paint 3D
Gingiva **Base 3**

High



- › Base color for rose-colored gingiva
- › Mixing with other colors







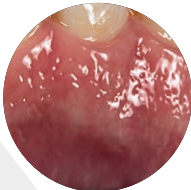
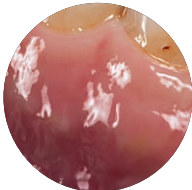

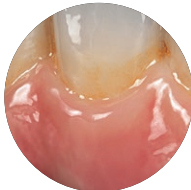
- › Base color for orange-pink gingiva
- › Mixing with other colors



- › Base color for pink-colored gingiva
- › Mixing with other colors



Pink esthetics

Effect				
				
Product	Paint 3D Gingiva Effect Lychee	Paint 3D Gingiva Effect Papaya	Paint 3D Gingiva Effect Pitahaya	Paint 3D Gingiva Effect Guave
Pigment concentration	Low	Medium	High	Medium
Application example				
	<ul style="list-style-type: none"> › Imitation of creamy, translucent, bone-like gingival areas › Creating cream-colored accents › Mixing with other colors 	<ul style="list-style-type: none"> › Imitation of orange, translucent, bone-like gingival areas › Creating orange-colored accents › Mixing with other colors 	<ul style="list-style-type: none"> › Imitation of intensely red-colored gingival areas, e.g. veins, deep gingival areas with heavy blood flow › Creating dark red accents › Mixing with other colors 	<ul style="list-style-type: none"> › Imitation of the light-colored gingival margin › Mixing with other colors



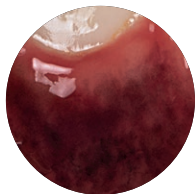
Paint 3D
Gingiva Effect **Grape**

Medium

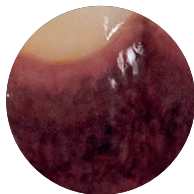


Paint 3D
Gingiva Effect **Raisin**

Medium



- › Imitation of dark-colored gingiva
- › Mixing with other colors



- › Imitation of strongly dark-colored gingiva
- › Mixing with other colors



Application techniques

Wet-in-Wet

The **Wet-in-Wet** technique represents **high speed** and **efficiency**.

The steps can be repeated and additional firings carried out as required.

White  Apply undiluted Glaze Fluo




1

Pink  Apply Gingiva Base

Classic

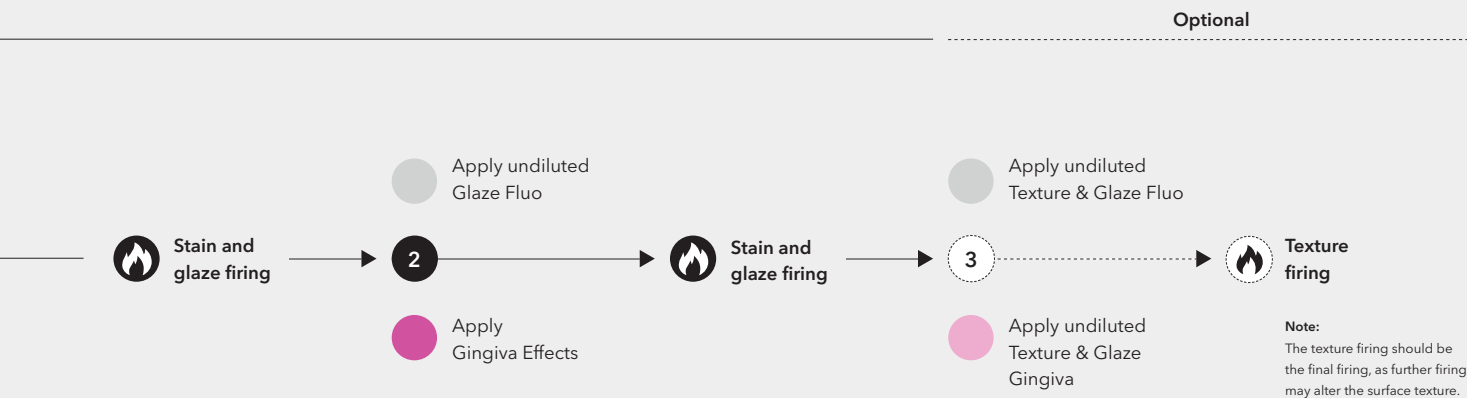
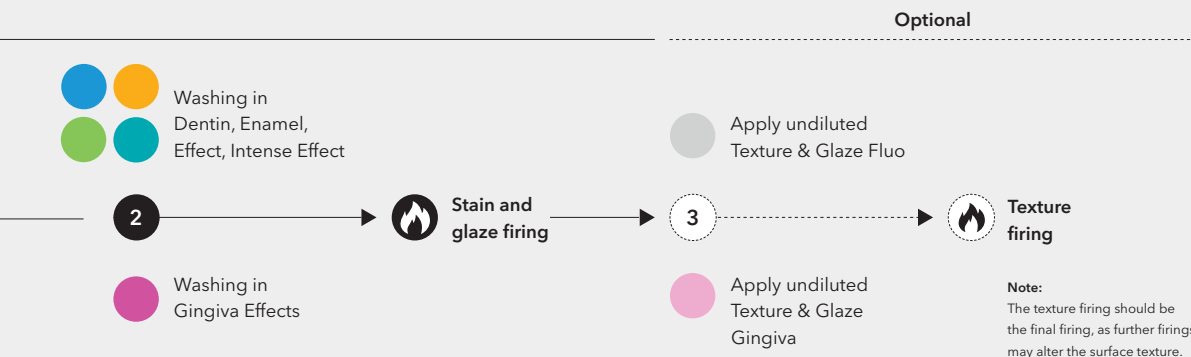
The **Classic** technique stands for **precise** and **detailed execution**.

The steps can be repeated and additional firings carried out as required.

White      Apply diluted Glaze Fluo, Dentin, Enamel, Effect, Intense Effect

1

Pink  Apply Gingiva Base



Wet-in-Wet



Prepare the restoration according to the instructions on page 5.



Apply undiluted Glaze Fluo paste evenly to the teeth.



Characterize teeth with the Dentin, Enamel, Effect and Intense Effect pastes.



Apply Gingiva Base and characterize with the Gingiva Effect pastes.

Optional: Texture



Conduct the stain and glaze firing according to the instructions on page 29.



Apply undiluted Texture & Glaze Fluo to the teeth and Texture & Glaze Gingiva to the gingival areas and model the morphology.



Perform the texture firing according to the instructions on page 29.







Classic



Prepare the restoration according to the instructions on page 5.



Apply a thin layer of diluted Glaze Fluo. Characterize teeth with the Dentin, Enamel, Effect and Intense Effect pastes.



Apply Gingiva Base to the gingival areas.



Conduct the stain and glaze firing according to the instructions on page 29.

Optional: Texture



Apply undiluted Glaze Fluo paste evenly to the teeth. Characterize gingival areas with the Gingiva Effect pastes.



Conduct the stain and glaze firing according to the instructions on page 29.



Apply undiluted Texture & Glaze Fluo to the teeth and Texture & Glaze Gingiva to the gingival areas and model the morphology.



Perform the texture firing according to the instructions on page 29.

Mixtures

Mixing options

Dentin Bleach + Enamel Sky



1:1



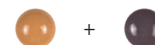
Dentin Bleach + Enamel Sea



1:1



Dentin Bleach + Enamel Shadow



1:1



Dentin A + Effect Peach



1:1



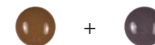
Dentin A + Enamel Sea



1:1



Dentin A + Enamel Shadow



1:1



Effect
Peach



+

Effect
Apricot



1:1



Effect
Peach



+

Enamel
Cloud



1:1



Effect
Peach



+

Gingiva
Effect
Papaya



1:1



Enamel
Sea



+

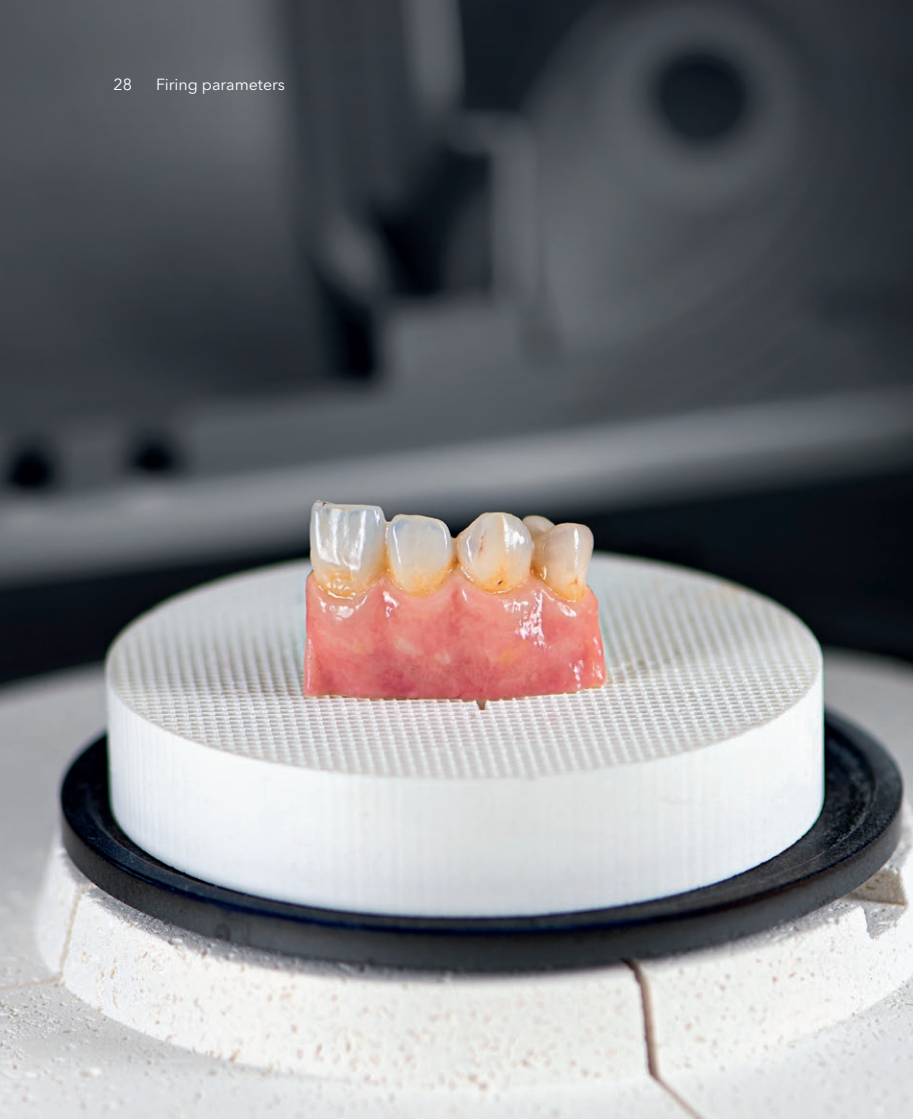
Enamel
Shadow



1:1



Each patient, case, and tooth color is unique. Take advantage of various mixing options to create your own colors - achieving the best possible optical and clinical results.



Firing parameters

Stain and glaze firing when using the staining technique (monolithic)

Paint 3D Glaze Fluo, Dentin, Enamel, Effect, Intense Effect, Glaze Gingiva, Gingiva Base, Gingiva Effect

Paint 3D	Stand-by temperature B °C	Closing time S* min	Heating rate t °C/min	Firing temperature T °C	Holding time H min	Vacuum on V1 °C	Vacuum off V2 °C	Long-term cooling L °C
Zirconium oxide (ZrO ₂) 1 - 4 units	403	IRT / 6	45	710	2:00	-	-	-
Zirconium oxide (ZrO ₂) 5 - 7 units	403	IRT / 6	40	720	2:00	-	-	**
Zirconium oxide (ZrO ₂) 8 - 14 units	403	IRT / 6	30	730	2:00	-	-	**
Lithium disilicate (LS ₂) CAD	403	IRT / 6	45	710	2:00	-	-	***
Lithium disilicate (LS ₂) Press	403	IRT / 6	45	710	2:00	-	-	-
Leucitereinforced glass-ceramic CAD	403	IRT / 6	45	710	2:00	-	-	-

* IRT standard mode ** In case of significant differences in the cross-sections of individual units within a restoration, long-term cooling L down to 500°C is recommended for each firing cycle.

*** For layer thicknesses exceeding 2 mm, long-term cooling L down to 500°C is required.

Texture firing in the texturing technique (monolithic)

Paint 3D Texture & Glaze Fluo, Texture & Glaze Gingiva

Paint 3D	Stand-by temperature B °C	Closing time S* min	Heating rate t °C/min	Firing temperature T °C	Holding time H min	Vacuum on V1 °C	Vacuum off V2 °C	Long-term cooling L °C
Zirconium oxide (ZrO ₂) 1 unit	403	IRT / 6	45	710	2:00	550	710	-
Zirconium oxide (ZrO ₂) 2 - 4 units	403	IRT / 6	40	710	2:00	550	710	-
Zirconium oxide (ZrO ₂) 5 - 7 units	403	IRT / 6	45	720	2:00	550	720	500
Zirconium oxide (ZrO ₂) 8 - 14 units	403	IRT / 6	30	720	2:00	550	720	500
Lithium disilicate (LS ₂) CAD	403	IRT / 6	45	710	2:00	550	710	***
Lithium disilicate (LS ₂) Press	403	IRT / 6	45	710	2:00	550	710	-

* IRT standard mode *** For layer thicknesses exceeding 2 mm, long-term cooling L down to 500°C is required. **Note:** The texture firing should be the final firing, as further firings may alter the surface texture.

Stain and glaze firing in the layering technique (full veneering/partial veneering)

Paint 3D Glaze Fluo, Dentin, Enamel, Effect, Intense Effect, Glaze Gingiva, Gingiva Base, Gingiva Effect

Paint 3D	Stand-by temperature B °C	Closing time S* min	Heating rate t °C/min	Firing temperature T °C	Holding time H min	Vacuum on V1 °C	Vacuum off V2 °C	Long-term cooling L °C
Veneering ceramics (all-ceramic) / zirconium oxide (ZrO ₂) 1-4 units	403	IRT/6	45	710	1:00	-	-	450
Veneering ceramics (all-ceramic) / zirconium oxide (ZrO ₂) 5-7 units	403	IRT/6	40	720	1:00	-	-	450
Veneering ceramics (all-ceramic) / zirconium oxide (ZrO ₂) 8-14 units	403	IRT/6	30	720	1:00	-	-	450
Veneering ceramics (all-ceramic) / lithium disilicate (LS2) CAD	403	IRT/6	60	710	1:00	-	-	-
Veneering ceramics (all-ceramic) / lithium disilicate (LS2) Press	403	IRT/6	60	710	1:00	-	-	-
Veneering ceramics (low-fusing metal-ceramic)	403	IRT/6	60	750	1:00	-	-	-
Veneering ceramics (classic feldspar ceramics)	403	IRT/6	60	830	1:00	-	-	-

* IRT standard mode

Note:

These firing parameters are guidance values.
Deviations (approx. ± 10 °C/18 °F) may occur:























- › Depending on the furnace generation
- › Ceramic furnaces of other manufacturers
- › Regional differences in the supply voltage
- › Operating several electrical devices in the same electric circuit



Delivery forms













White esthetics



	767479	Sagemax Paint 3D Starter Kit
	767480	Sagemax Paint 3D Dentin Bleach 4 g
	767481	Sagemax Paint 3D Dentin A 4 g
	767482	Sagemax Paint 3D Dentin B 4 g
	767483	Sagemax Paint 3D Dentin C 4 g
	767484	Sagemax Paint 3D Dentin D 4 g
	767485	Sagemax Paint 3D Enamel Cloud 4 g
	767496	Sagemax Paint 3D Enamel Sky 4 g
	767497	Sagemax Paint 3D Enamel Sea 4 g
	767498	Sagemax Paint 3D Enamel Deep Sea 4 g
	767499	Sagemax Paint 3D Enamel Smoke 4 g
	767500	Sagemax Paint 3D Enamel Shadow 4 g
	767501	Sagemax Paint 3D Effect Peach 4 g
	767502	Sagemax Paint 3D Effect Peanut 4 g
	767503	Sagemax Paint 3D Effect Apricot 4 g
	767504	Sagemax Paint 3D Intense Effect Milk 4 g
	767505	Sagemax Paint 3D Intense Effect Vanilla 4 g
	767506	Sagemax Paint 3D Intense Effect Caramel 4 g
	767507	Sagemax Paint 3D Intense Effect Hazelnut 4 g
	767508	Sagemax Paint 3D Intense Effect Espresso 4 g
	767510	Sagemax Paint 3D Glaze Fluo 4 g
	767509	Sagemax Paint 3D Texture & Glaze Fluo 4 g
	767511	Sagemax Paint 3D Universal Liquid 15 ml

Pink esthetics



	767512	Sagemax Paint 3D Gingiva Kit
	767513	Sagemax Paint 3D Gingiva Base 1 4 g
	767514	Sagemax Paint 3D Gingiva Base 2 4 g
	767515	Sagemax Paint 3D Gingiva Base 3 4 g
	767516	Sagemax Paint 3D Gingiva Effect Lychee 4 g
	767517	Sagemax Paint 3D Gingiva Effect Papaya 4 g
	767518	Sagemax Paint 3D Gingiva Effect Pitahaya 4 g
	767519	Sagemax Paint 3D Gingiva Effect Guave 4 g
	767520	Sagemax Paint 3D Gingiva Effect Grape 4 g
	767521	Sagemax Paint 3D Gingiva Effect Raisin 4 g
	767523	Sagemax Paint 3D Gingiva Glaze 4 g
	767522	Sagemax Paint 3D Gingiva Texture & Glaze 4 g



Manufacturer
DSSM AG
Im alten Riet 9
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Liechtenstein

Rx
ONLY



For dental use only!

See instructions
dssm-eifu.sagemax.com

