

VINTAGE

VINTAGE ART Fluorescent Porcelain Stains



INSTRUCTIONS FOR USE





Introduction

VINTAGE Art fluorescent porcelain stains are designed to realize the internal and external modification of shades for all existing high fusing PFM porcelain systems. In addition they can be applied to all high fusing porcelain materials with zirconia / alumina ceramic frames, CAD/CAM porcelain blocks, press ceramics and artificial porcelain teeth. Even the ready to use Glazing Paste is highly fluorescent and supports a lifelike color impression. In a very simple way the reproduction of every natural tooth characteristic can be created with a vital appearance in the laboratory and dental office.

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1 NOTES ON USE

1-1 Notes

- 1 Keep away from flame or ignition source.
- 2 Use of eye-protective glasses is recommended for contouring work.
- 3 Use of dust extractor or mask is recommended for contouring work.
- 4 Do not mix this product with other stain products.
- 5 VINTAGE Art must only be used for the intended purpose.
- 6 VINTAGE Art must only be used by dental professionals.

1-2 Important Notes

- 1 If allergic reactions occur such as eruption or skin inflammation while using this product, discontinue use immediately and seek medical advice.
- 2 Avoid contacting soft tissues, skin or eyes. In case of eye contact, rinse immediately with plenty amounts of water and seek medical advice.

2 CHARACTERISTICS

2-1 Compatible with Various Dental Ceramic Materials

VINTAGE Art can be used with various high fusing dental ceramic materials, such as PFM, alumina cores, zirconia frames, pressable ceramics, CAD/CAM ceramic blocks as well as artificial porcelain teeth.

2-2 Easy to use Paste Stains

Due to the ultra-fine particle structures the ready to use Paste Stains have excellent handling and application properties as well as superb covering characteristics. The appliance of a thin layer can easily be done from beginners to experienced ceramists.

2-3 Wide Variety of Colors & Shades (32 colors)

The VINTAGE Art stain concept consists of primary stain colors (Pink, Blue and Yellow), secondary stain colors (Orange, Green and Violet) and shade stain colors (Shade Stains and Foundation Shade Stains). In total 32 colors are available to meet the requirements of various esthetic restorations. Complicated mixing is not necessary, so application becomes easier.

2-4 Fluorescence

VINTAGE Art are highly fluorescent stains which match the fluorescence of natural dentition and enhance the vitality of the ceramic frameworks.



3 SYSTEM COMPONENTS

Basic Color Set

17 Colors, 3 g each

- Glazing Paste, Pink, Yellow, Blue, Orange, Violet, Green, White, Black, Dark Red Brown, Orange Brown, Khaki, A-Shade, B-Shade, C-Shade, D-Shade, R-Shade
- VINTAGE Art Stain Liquid 50 ml
- Shade Color Card
- Instructions



Effect Color Set

16 Colors, 3 g each

- Glazing Paste, Brown, Black Brown, Gray, Blue Gray, Corn Yellow, Rose Pink, Wine Red, Pink Orange, Mamelon Pink, Mamelon Ivory, Foundation A-Shade, Foundation B-Shade, Foundation C-Shade, Foundation D-Shade, Foundation R-Shade
- VINTAGE Art Stain Liquid 50 ml
- Shade Color Card
- Instructions



Refills

- VINTAGE Art (32 colors / 3g each)
- VINTAGE Art Stain Liquid 50 ml



4 INSTRUCTIONS FOR USE

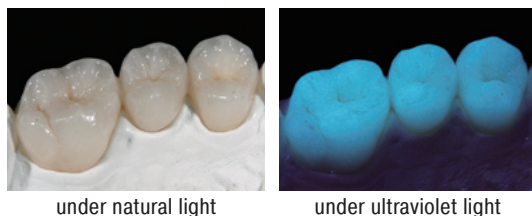
4-1 Colors and Indications

Color			Use example				
	Indication	Code	Shade adjustment	Cervical	Stain	Incisal	Gum
1	Glazing Paste	GP					
2	Pink	P	○	○			○
3	Yellow	Y	○				
4	Blue	Bl	○			○	
5	Orange	O	○	○	○		
6	Violet	V	○			○	○
7	Green	Gr	○				
8	Black	B	○		○		
9	White	W			○	○	
10	Dark Red Brown	DR-Br		○	○		
11	Orange Brown	O-Br		○	○	○	
12	Khaki	K		○	○		
13	A-Shade	AS	○	○			
14	B-Shade	BS	○	○			
15	C-Shade	CS	○	○			
16	D-Shade	DS	○	○			
17	R-Shade	RS	○	○			
18	Gray	G	○			○	
19	Blue Gray	Bl-G				○	
20	Corn Yellow	CY				○	
21	Brown	Br		○	○		
22	Black Brown	B-Br		○	○		
23	Mamelon Pink	MP				○	
24	Mamelon Ivory	Miv				○	
25	Rose Pink	RP		○			○
26	Wine Red	WR		○			○
27	Pink Orange	P-O		○			○
28	Foundation A-Shade	F-AS	○				
29	Foundation B-Shade	F-BS	○				
30	Foundation C-Shade	F-CS	○				
31	Foundation D-Shade	F-DS	○				
32	Foundation R-Shade	F-RS	○				

Base Color Stain Color Stain Shade Stain

4-2 Color Concept

The color concept of the VINTAGE Art system is logically structured in three main color groups. VINTAGE Art are highly fluorescent stains which match the fluorescence of natural dentition and enhance the vitality of the ceramic frameworks. The natural appearance of the shade is even maintained under artificial light conditions.

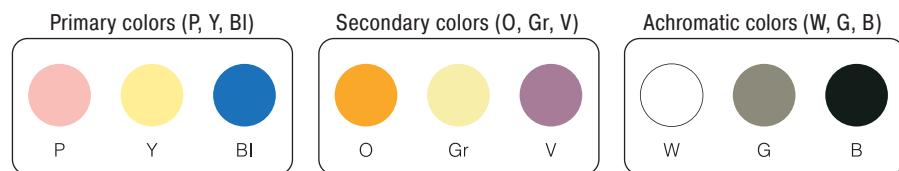


under natural light

under ultraviolet light

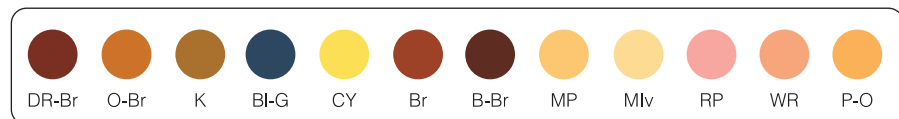
1. Base Color Stains

The esthetic color concept includes primary colors, secondary colors and achromatic colors.



2. Color Stains

Based on these shades all individual colors and color adjustments can be achieved for the reproduction of every individual tooth characteristic.



3. Shade Stains (AS, BS, CS, DS, RS, F-AS, F-BS, F-CS, F-DS, F-RS)

The coloration in the desired shade group of finished milled or pressed ceramic crowns and bridges can be obtained just by a surface application with these stains. Foundation Shade Stains are designed with lower value compared to Shade Stains. These shades offer unique possibilities for obtaining three-dimensionality with metal-free and metal-bonded porcelain works. This can be achieved by a direct application of a thin layer on the Opaque or on alumina or zirconia frameworks to establish the basic shade of the restoration.



Hint Foundation Stains are designed with less brightness than Shade Stains.

4-3 Examples for Use

Hint Please mix the Paste Stains well with a plastic spatula before usage. If an adjustment of the viscosity is needed, please add a small quantity of Stain Liquid according to the personal preference. Moisten the grinded and cleaned surface with a thin layer of Stain Liquid, apply the Paste Stains pure or mixed and fire according to the firing schedule. The viscosity of the fluorescent Glazing Paste can be modified as well by mixing with Stain Liquid.

1. Base Color and Hue Color Circle

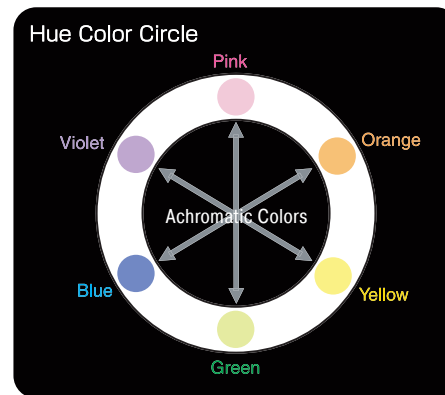
The above hue color circle displays the primary colors such as Pink, Yellow and Blue. Between the primary colors the secondary colors are located. In the center of the hue color circle there are the achromatic colors. The opposing colors of the hue color circle are called "complementary colors" and are neutralizing each other, which means that when mixed in equal quantities opposing shades turn gray. This is based on the subtractive color mixing theory.



White

Gray

Black



Complementary colors

Achromatic colors such as White, Gray and Black can be used for the adjustment of brightness (value). In addition Gray and Black can reduce the light reflection by applying on the surface of Opaque Porcelain or Opaque Liner. If White is mixed adequately, adjustment of opacity is possible.

2. External Adjustment of Shades

By mixing the colors in different quantities the intensity of the hue color increases and the value is reduced. By utilizing complementary colors, for example, if the Green tone should be reduced, reddish color as the complementary color of Green can be applied to adjust the tooth shade.

Adjustment of ceramic restorations



A2 shade guide

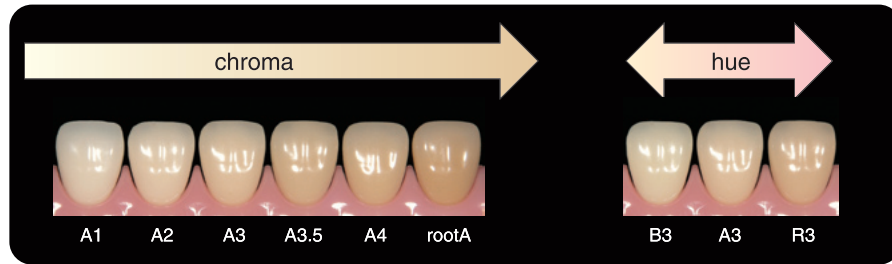
green tone crown

A2 shade guide

after adjustment

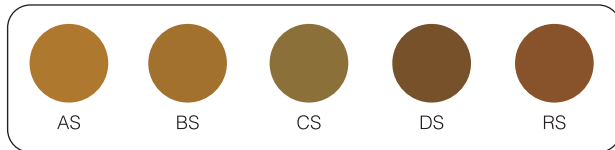
3. Recommended stains for the shade adjustment (chroma and hue)

Shade Stains and Foundation Stains are recommended for the shade adjustment of chroma and hue.

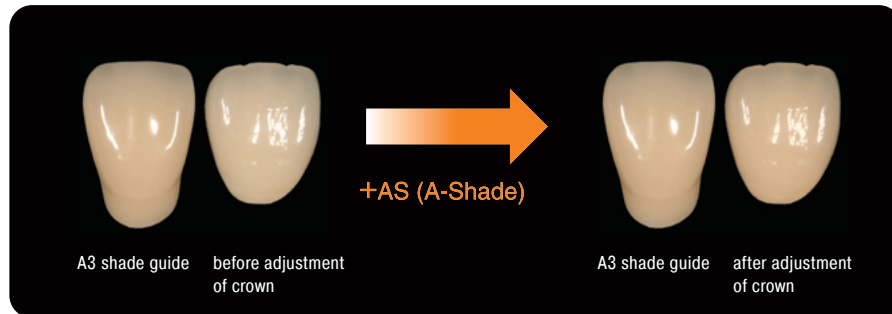


Shade Stains (AS, BS, CS, DS, RS)

Shade Stains are recommended for the shade adjustment of finished ceramic restorations. They should be applied on the porcelain surface to adjust the chroma and hue of the shade. They can also be used on the opaque surface of metal ceramic porcelain for the adjustment of the base color.



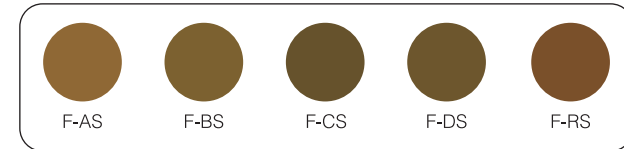
Example: In order to make stronger A-Shade, AS (A-Shade) is applied.



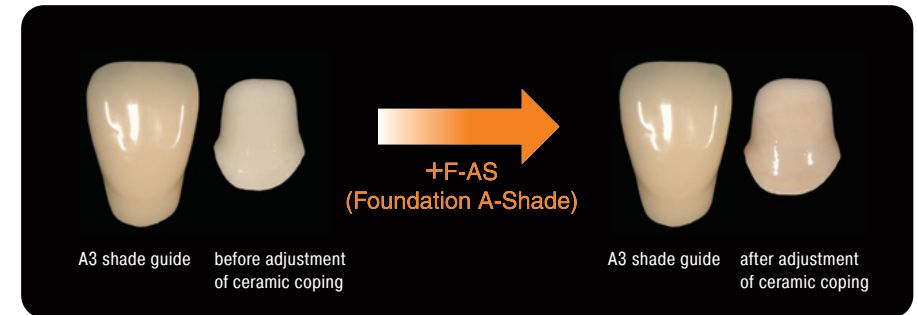
Hint Since Shade D4 has a different hue, an appropriate amount of B-Shade shall be mixed with D-Shade.

Foundation Shade Stains (F-AS, F-BS, F-CS, F-DS, F-RS)

An extremely lifelike three-dimensional effect can be created with the internal application of Color Stains and Shade Stains. Even the value can be adjusted by internal staining. Foundation Shade Stains are recommended for the shade (chroma and hue) adjustment of alumina or zirconia frames. Foundation Shade Stains are designed with lower value compared to Shade Stains.



Adjustment of ceramic restorations



Hint In order to make D4 shade, mix F-DS (Foundation D-Shade) with appropriate amount of F-BS (Foundation B-Shade).

4. Outer Staining

Interproximal, cervical and occlusal applications (ridges, fissures and cusps)

To create an individual occlusal surface, Orange and Brown can be applied thinly to the center of the occlusal area. Dark Red Brown can be placed in the fissure by using a very small brush. The cusps can be emphasized with White, Orange or Blue. For interproximal and cervical areas, Shade Stains or Khaki can be selected depending on the clinical case.



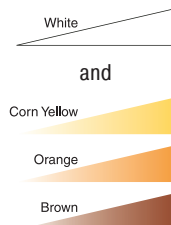
Adjustment of occlusal center



Adjustment of pits and fissures

Shade application of white bands and decalcifications

To create white or bright bands or decalcification areas, White or Corn Yellow can be used individually or mixed with a brush or a fine instrument. A 1:1 mixture is often required. It is also possible to stain these effects internally after the first firing of body.



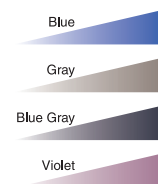
White band



Decalcification

Shade application on the incisal area (adjustment of translucency)

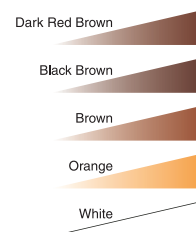
To intensify the translucency of the incisal area and to adjust the light reflection, Blue, Gray, Violet or Orange can be thinly applied palatally. The frontal application of Paste Stains creates a stronger coloration.



Adjustment of translucency

Applications of stains, hair lines and crack lines

Strong staining and discoloration – such as experienced by smokers and tea drinkers – can be accurately reproduced with Dark Red Brown, Black Brown or Brown with a small brush. To create hair lines, Dark Red Brown, Black Brown or Brown are recommended. The thickness, length or position of the lines is adjusted with a clean brush by eliminating excess of stain materials. Crack lines can be also created by using White or a mixture of White and Orange instead of Brown.



Hair line crack



Staining of nicotine or food

Shade application of reddish gum effects on the cervical area

The shade of the cervical area of natural teeth is slightly reddish because of the reflecting gum color. Fine adjustment for reddish gum effects on the cervical areas can be achieved by using Pink, Rose Pink, Wine Red, Pink Orange or Foundation Stain. Pink, Rose Pink, Wine Red or Pink Orange are designed gum colors used to enhance the reddish appearance of the cervical area.



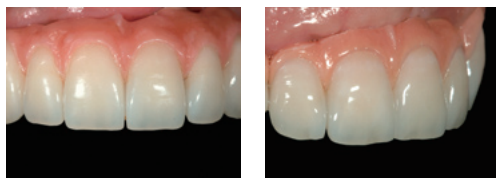
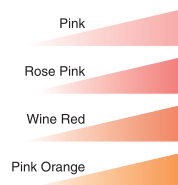
Natural teeth



Image of cervical shade

Staining of gingiva porcelain

Especially for implant supported restorations the stain colors White, Pink, Rose Pink or Pink Orange are recommended for creating individual gum colors. Violet, Brown and Black are also used to create melanin discoloration or gingival sulcus.



Adjustment of gum color

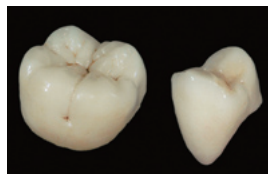
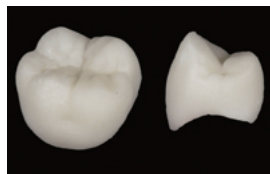
Staining of press ceramic / CAD/CAM crowns

Any required color adjustment and natural individualisation after pressing or milling can be achieved with VINTAGE Art Stains.

- Basic shades with stains AS or BS
- Enamel effects with Blue White and Gray
- Cervical effects with Khaki, Brown, Orange Brown or Dark Red Brown



Crowns after pressing



After shade adjustment

Characterization of artificial porcelain teeth

VINTAGE Art can be used to individualize conventional porcelain teeth.



Porcelain teeth



After contouring and shade adjustment



Hint

When VINTAGE Art stains are used to individualize artificial porcelain teeth, the firing schedule should be different compared to the regular firing of ceramic crowns.

5. Inner Staining

Designing of mamelon shapes and adjustment of translucency

If the mamelon structure is clearly expressed, Mamelon Pink, Mamelon Ivory or Pink Orange can be applied onto the mamelon structure for reducing the dominance.



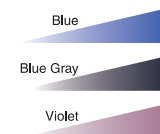
Adjustment of
mamelon structure



Emphasized
mamelon structure

Shade application on the incisal area (adjustment of translucency)

To intensify the translucency of the incisal area and to adjust the light reflex ion, Blue, Gray, Violet or Orange can be thinly applied palatally. The frontal application of Paste Stains creates a stronger coloration.



Adjustment of translucency

Note

- 1 Stain Paste might separate in storage, so mix well before usage.
- 2 When using a spatula or brush, water should be eliminated completely.
- 3 For the adjustment of the viscosity of the paste, VINTAGE Art Stain Liquid is used.
- 4 Depending on the type of porcelain furnace, the firing temperature varies, so a test firing is recommended.

5 FIRING SCHEDULE

For use of foundation or inner porcelain staining

Drying °C	Drying min.	Vacuum Start °C	Inc. Temp. °C/min.	Final Temp. °C	Vacuum End °C	Hold min.
600	5-7	—	50-60	830-850	—	—

For use of outer staining

Drying °C	Drying min.	Vacuum Start °C	Inc. Temp. °C/min.	Final Temp. °C	Vacuum End °C	Hold min.
600	5-7	—	50-60	850-870	—	—

For characterizing of porcelain teeth

Drying °C	Drying min.	Vacuum Start °C	Inc. Temp. °C/min.	Final Temp. °C	Vacuum End °C	Hold min.
600	5-7	—	50-60	1,000	—	2

Hint

If the ceramic frame (alumina or zirconia) was finished with silicone polishers, the wettability with porcelains and stains might become lower. The following thermal treatment is recommended before the application of VINTAGE Art stains:

Drying °C	Drying min.	Vacuum Start °C	Inc. Temp. °C/min.	Final Temp. °C	Vacuum End °C	Hold min.
600	5-7	—	50-60	1,050	—	5

Note

Firing temperature varies depending on the type of furnace, so test firing is recommended for appropriate firing conditions.

6 TROUBLESHOOTING

● Porcelain Stain

Trouble	Cause	Solution
Crack on stain surface	Layer too thick	Apply thin layer
Bubbles	Layer too thick	Apply thin layer
	Drying temperature too high	Dry with appropriate temperature
	Drying time too short	Dry with appropriate time
	Firing temperature too high	Fire with appropriate temperature
	Firing tray temperature too high	Place firing tray at least 2-3 minutes after firing stage is open
	Contamination of application surface	Clean the abrasive dust with sandblasting machine
	Contamination of Stain Liquid with water	Avoid contamination with water (for cleaning of the brush the use of Stain Liquid is necessary)
	Stain Paste is not in smooth condition	Mix well with a spatula before usage
Drying of stain	Cap was not sealed tightly and liquid evaporated	Add VINTAGE Art Stain Liquid and mix well

● Porcelain

Trouble	Cause	Solution
Cracking of porcelain	Layer too thick	Apply thin layer and fire
Bubbles in porcelain	Layer too thick and bubbles included	Apply thin layer and fire
Lifting of porcelain due to shrinkage	Firing temperature too high	If the stain surface is too shiny, select a lower temperature so that the stain surface does not get a shiny surface
White discoloration of porcelain	Porcelain was contaminated by Stain Liquid	Stain is applied after firing of porcelain (Stain Liquid consists of organic elements and it should not be mixed with porcelain powder, as it is difficult to evaporate)

CE 0120



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