



We reserve the right to make changes as a result of the continuous development of our products. The latest digital version of the instructions for use can be found on our homepage at: [www.dentaldirekt.de/en](http://www.dentaldirekt.de/en)

**This version replaces all previous versions.**



[dentaldirekt.de/  
en/downloads](http://dentaldirekt.de/en/downloads)

# DD Incisal X

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## I) GENERAL INFORMATION

Valid for the liquid system:

- DD Incisal X



### 1. Indications

**DD Incisal X** are liquids for coloring and individualizing up to four adjacent units in the anterior region for bridges with up to 14 units as well as single tooth restorations, manufactured from DD Bio ZX<sup>2</sup> color or DD cube ONE<sup>®</sup> ML zirconium dioxide milling blanks, for the fabrication of dental restorations.



### 2. Contraindications

Do not use in case of intolerance to the contained components. Please observe the contraindications of the respective used Dental Direkt zirconium dioxide. The coloring liquids are not compatible with zirconium dioxide ceramics from other manufacturers.

### 3. Safety instructions

Please observe the information in the respective current version of the safety data sheet. Wear gloves, safety goggles and mouth protection to avoid irritation. The liquid is not suitable for consumption. Please do not eat, drink or smoke while processing the liquid. Processing must only be carried out by trained personnel and using proven techniques.

### 4. Handling, storage and disposal

Check the integrity of the bottle before processing the liquid for the first time. Store the liquids exclusively in the tightly closed original container at maximum 25 °C, ideally in the refrigerator (6 - 8 °C). To avoid contamination, liquid that has already been used should not be mixed with unused liquid. Non-compliance with this rule can lead to color changes. Dispose of any remaining liquid and the bottle in accordance with applicable government regulations. The liquid must not be disposed of down the drain or with household waste.

5. **Material**  
**Chemical composition [Weight %]**

Basis (evaporates completely while sintering)	H <sub>2</sub> O	≤ 50
	HCl	≤ 0.5
	PEG	≤ 2
Metal oxides		≤ 53
Color pigments		≤ 0.2

II) **VARIANTS**

- **DD Incisal X - X0**
- **DD Incisal X - X2**

With the DD Incisal X coloring liquids you have the option of specifically influencing the appearance and translucency in the incisal area.

Variant **X0** is particularly suitable for selectively increasing the translucency after prior individualization of the restoration with the DD Art Elements effect shades. For further processing guidelines on the use of DD coloring solutions, see the current version of the DD Shade Concept® instructions for use in the Download Center at: [www.dentaldirekt.de/en/downloads](http://www.dentaldirekt.de/en/downloads).

The **X2** variant is designed to increase translucency on all 16 VITA® tooth shades and bleach shade and to specifically influence the optical impression.

III) **AIDS FOR COLORING**



**Plastic  
tweezer**



**Metal free  
brush**



**DD Bio Z  
applicator**



**Pipette**



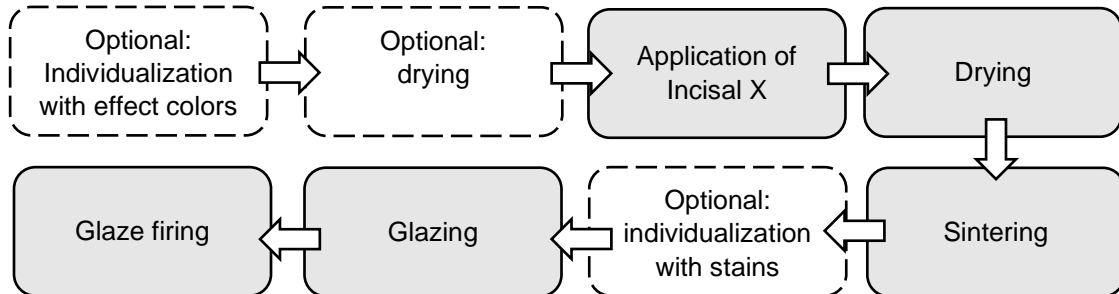
**Watch  
glass**



**ATTENTION!**

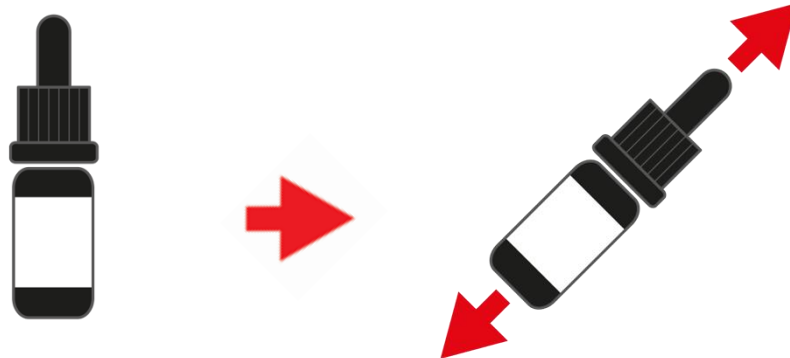
We recommend using plastic instruments to avoid metal traces on the restorations.

#### IV) APPLICATION FLOW



#### ATTENTION!









Before use, the liquid must be shaken well!



With the help of the pipette contained in the screw cap, take a few drops from DD Incisal X and place them in a clean container/watch glass. To avoid contamination, already used liquid should not be mixed with unused liquid.

#### V) APPLICATION TECHNIQUE

For an optimum translucency and color gradient, DD Incisal X is applied in 4 layers over the complete width of the incisal area. The application can optionally be carried out with the DD Bio Z applicator or a metal-free brush, the dipping technique must not be used. Do not treat the connectors in multi-unit restorations. Drying between the application of the individual layers is not necessary. The application should be vestibular as well as oral. Make sure that the application includes the incisal edge. The following four processing steps must be performed, example based on a single anterior tooth:

APPLICATION - STEP BY STEP		
View from vestibular	View from oral	Step
		1) Application to the top half
		2) Application to the upper third
		3) Application to the upper quarter
		4) Identical to step 3 (Application to the upper quarter)

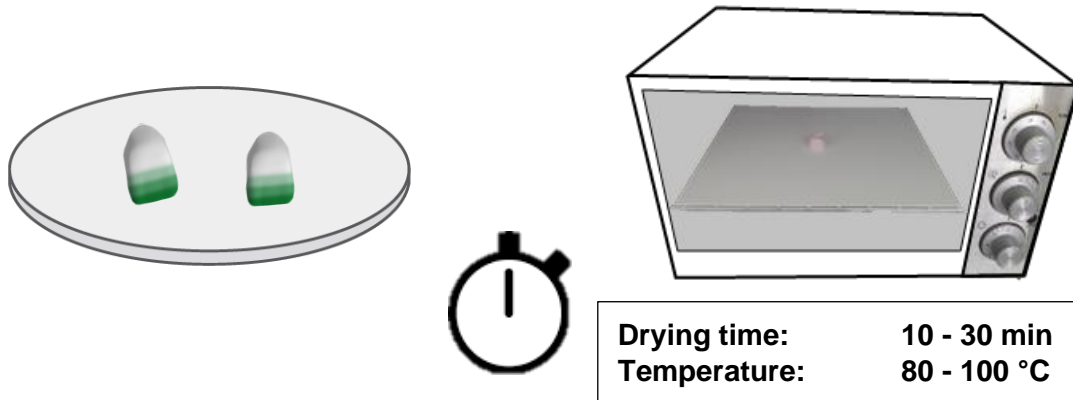
The coloration of the liquid may deviate from the illustration, this has no influence on the result after sintering.



To obtain an optimum shade result with DD Incisal X - X0, individualization with DD Art Elements effect colors should be carried out in advance. The application of X0 alone leads to an increase in translucency with a whitish appearance of the incisal area.

## VI) DRYING

For pre-drying of the constructions we recommend the use of a small household oven with circulating air and timer function because here, in contrast to other drying methods, an almost uniform heat distribution is guaranteed.



Place your frameworks on a ceramic plate in the oven that they can be "washed around" by the circulating air .



### ATTENTING!

To achieve a homogeneous color result, the frameworks should be dried directly after coloring.



### ATTENTION!

You should only use this oven for drying your zirconium dioxide constructions and not for preparing any kind of food!

## VII) SINTERING

For **optimum results**, with the for DD Incisal X suitable Dental Direkt zirconium dioxide materials (DD Bio ZX<sup>2</sup> color, DD cube ONE<sup>®</sup> ML), we recommend:

End temperature:	1450 °C
Holding time:	2 h



### ATTENTION!

Increased sintering temperature leads to brighter color results!

**Sintering cycle\*:**

*for normal furnace filling without cover*

- ↑ Heating up to 900 °C (8 °C/min),
- 30 min dwell time at 900 °C ,
- ↑ Heating up to final temp. 1450 °C (3 °C/min),
- 120 min dwell time at 1450 °C
- ↓ Cool down to at least 200 °C (10 °C/min)



**\*IMPORTANT!**

Please be sure to refer to our separate sintering instructions for the selection of the optimum furnace program.

**VIII) GLAZING**

An additional glaze application not only results in an exact match with the desired shade, but also makes the restoration look more natural and esthetic.



**Firing table for DD contrast® glaze :**

	Starting temp. [°C]	Drying time [min]	Closing time [min]	Heating rate [°C/min]	End temp. [°C]	Dwell time [min]	Cooling [min]	Vacuum
<b>Glaze firing</b>	450	3	3	45	810	1	3	Max. (=100%)

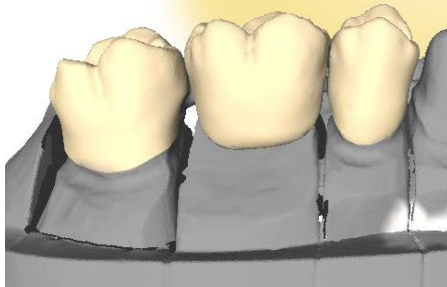
We recommend the use of glazes fired at below 850 °C. Increased temperatures as well as multiple repetition of glaze firing can lead to color changes.





**TIP**













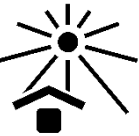

*Light irradiation*



**Always place the restoration on the model for color evaluation!**



IV) SYMBOL EXPLANATIONS

 <p>Manufacturer</p>	 <p>Upper limit of temperature</p>
 <p>Date of manufacture</p>	 <p>Caution: U.S. Federal law restricts this device to sale by or on the order of a dentist.</p>
 <p>Consult instructions for use</p>	 <p>Content (Amount)</p>
 <p>Use-by date</p>	 <p>Medical device</p>
 <p>Batch Code</p>	 <p>Caution: Corrosive</p>
 <p>Catalog number</p>	 <p>Caution: Oxidizing</p>
 <p>Keep away from sunlight</p>	 <p>Attention: Hazardous to the environment</p>