

ZYTTRIA®

AQUA

WATER-BASED COLOR LIQUID FOR ZYTTRIA®

Water based colour liquid
to apply colour to pre-sintered frameworks
made of Yttria stabilized Zirconium Oxide with
DIPPING TECHNIQUE

concept



CE 0476

REG. SAN. N. 64314

- **AQUA-W**
- **AQUA-T**
- **AQUA-T PLUS**

USER MANUAL

Rev. 2 - 2017/01/20

Medical devices, Class IIA, accor. to Appendix IX, (to Rule 8, par.1), of 93/42/EEC.
GMDN NO: 38733 - Colors for presintered zirconia.

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1. COLORING LIQUID TYPES

The AQUA colours are optimised for the different type of Zirconium Oxide, according to its specific absorption characteristics.

● **AQUA-W**
suitable for applying colour to Zyttria Z401 White Traslucent by dipping









● **AQUA-T**
suitable for applying colour to Zyttria Z402 Extra-Traslucent by dipping

● **AQUA-T PLUS**
suitable for applying colour to Zyttria Z402 Extra-Traslucent Plus by dipping

2. CHARACTERISTICS

- **Water based, acid free**
- **not corrosive** for metal instruments or metal surfaces of the workbench;
- **not harmful** for the heating elements of the sintering furnace;
- **free of oleic substances so that**, exploiting capillarity of Zirconia, the infiltration in the framework is fast and deep;
- **no areas are detected lighter** on the framework at the cutting of the milling pins;
- AQUA colouring liquids **don't have influence on density, on mechanical resistance and on toughness** of the framework after sintering.
- **AQUA colour is quite intense. For dilution see section 4**

3. MEANING OF SYMBOLS ON THE LABEL

	European conformity (Ce) mark with notified body identification number for Class IIa.
	Manufacturer
	Catalog number
	Batch code
	Store the product in a cool and dark place, within recommended temperature 5°C +10°C
	Use-by date
	Consult instructions for use
	Avoid release to the environment

4. PREPARE SURFACE



WARNING

If a **WATER MILLING** is made it's necessary **to burn every trace of lubricant.**

Possible oleic traces may prevent the colouring liquid to spread homogeneously, with the appearance of uncoloured areas and with negative effects on translucency.

Thermic treatment procedure (temp. 850°C):

- Gradient 25-30°C up to 850°C
- Hold time 850°C for 5-10 min.
- Cooling time 25°C/min.

4.1 Framework separation

After milling, separate framework from the block/disc, cutting connections.

4.2 Polishing

Remove connections from the surface of the framework and polish carefully not to cause chipping or cracking.

4.3 Perfect cleaning

Remaining powder from milling, if not eliminated, prevents the correct absorption of the colour. It's important that the Zirconia framework is completely dust free, oil free and dry.

Pay attention that the framework is well cleaned and dry even inside, in the occlusal areas and asperities.

Remove remaining powder from milling

Clean with a brush, paying attention not to occlude porosities.

Washing the framework with distilled water is very effective. In this case, before going forward with the colouring, dry the framework in a proper way.



NOTE.

A clean framework prevents the dust from depositing in the colour liquid, saturating it, with negative effects on the final outcome.



NOTE

Changes of shades may be possible according to the type of Zirconia used (white or translucent).

E.g. the A1 colour of AQUA-W product line tends to A2/A3 colour when using a translucent material, looking like a darker colour.

5. CHOICE OF THE COLOUR

Choose a colour next to the patient's tooth colour according to Vita Scale from the wide AQUA selection.

WARNING

AQUA colour is quite intense.

DILUTION RECOMMENDED

A dilution of 30% (70% colour, 30% distilled water) is recommended.

It's possible to adjust the colour according to requirements changing the percentage of distilled water.



6. COLOURING

6.1 Take the bottle from the refrigerator, checking it is well closed.

6.2 Shake the colour liquid well for a few seconds making sure that potential sediments are dissolved.

6.3 Don't touch the framework to be coloured with wet or greasy hands, to avoid that the colour liquid do not spread well on the framework.

6.4 With the help of a small metal tweezers dip the framework into the solution for approx. 10/15sec. A longer immersion time don't affect the intensity of the colour. Should the framework be too big to be placed directly in the original bottle, pour the liquid in another well cleaned glass bowl

6.5 After dipping, wipe excess drops with a cellulose free paper napkin or with distilled water.

6.6 It's possible to wet carefully the framework with compressed air (max 0,2 bar). In order to have a uniform colouring, avoid that excess of colour rests on cavities or on empty spaces).

6.7 After use store the colour liquid in the original bottle, hermetically closed, and put it in the refrigerator.

6.8 Clean the glass bowl with a paper napkin and rinse well with water and cleaning soap.

Attention: never use glass bowls that may be in touch with food.

7. DRYING/ SINTERING

Dry for 30 minutes in a fan assisted oven with warm air at a temperature of 80°C.
Drying time may increase up to one hour for big frameworks.

The drying can be made with infrared lamp as well, paying attention to adjust the distance (25-30 cm) not to “burn” Zirconia surface preventing a deep drying.

8. SINTERING

Follow instructions on ZYTTRIA® Zirconia User’s Manual.

After the sintering of the prosthetic framework, if necessary, is possible to make small wet grindings with diamond grinders.

Tools made of Carborondum (silicon carbide) or hard metal burs must not be used

9. CERAMIC COATING

Ceramic coating of crowns and bridges manufactured with ZYTTRIA®ACQUA products may be realized with standard ceramics available on the market with a coefficient of thermal expansion (CET) suitable for Zirconia.

Consult the ceramic manufacturer’s technical manual for information about coefficient of expansion and about treatments (thermal or chemical) to be realized on the framework before ceramic coating.

10. RECOMMENDATION FOR SECURITY

It’s necessary to observe the following security measures:

- wear safety glasses and gloves
- do not eat, drink or smoke when using liquids
- make sure the working station is aired either during colouring phase or drying phase
- in case of eye contact: rinse open eyes with water for a few minutes
- in case of skin contact: wash out immediately with water and soap
- in case of swallowing: do not induce vomiting
- in case of inhalation: consult a doctor

11. STORAGE

Liquid can be stored hermetically closed for 3 years at a temperature of 5°C÷ 10°C.