

ALPRO Water- care Systems Guide



 **ALPRO®**
ALPRO MEDICAL GMBH

The image displays a variety of Alpro medical products and their associated documentation. On the left, a large white bottle of **Bilpron** is shown, with its label detailing its use for preventing biofilm formation in water-conducting units. Below it is a smaller bottle of **BRS Remover**. To the right, another large white bottle of **Alpron** is visible, labeled for the removal of biofilm in dental treatment units. Below the Alpron bottle is a box of **BRS PreCleaner**. In the foreground, several pieces of paper are scattered, including a certificate of analysis (CE 0123), a product information sheet for Bilpron, and a certificate of analysis for BRS Remover. The background is a textured, light blue surface.



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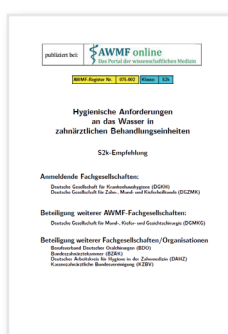
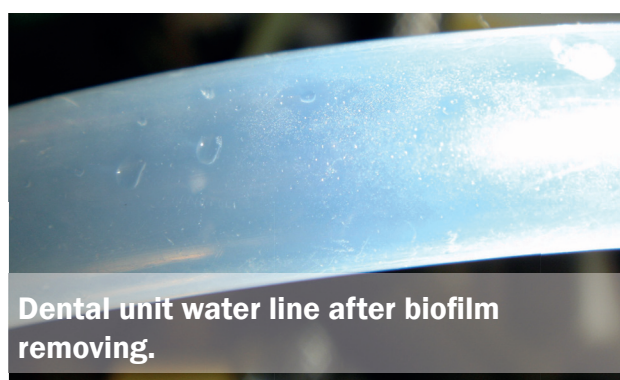
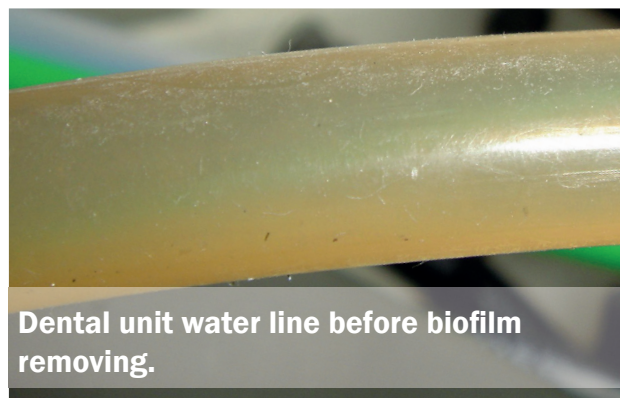
Biofilm in dental unit water lines

Biofilm is an accumulation of different bacteria in a protective matrix of **extracellular polymer substances** (EPS). They are organized, structured and communicative. These microorganisms live in complex organisations, so-called biofilms.

Biofilm and anorganic residues in dental units lead to microbial contamination, blockages, low water flow and smell as well as appearance of particles in the tumbler filler.

The degree of contamination in the water lines of your dental unit can be monitored with the Biotest of ALPRO. This semi-quantitative test is easy to use and can be easily evaluated by yourself. Thus you can monitor the quality of your treatment water at any time.

With the Biofilm-Removing-System from ALPRO biofilm in dental units can be removed safely without blockages. The subsequent application of Alpron for the short-term disinfection and the disinfectant Bilpron for idle time disinfection of the dental unit water lines ensures that biofilm cannot form again. So you can make sure to use water of an optimal quality.



The AWMF (Association of the Scientific Medical Societies) guidelines provide practical help for the implementation of the requirements of the KRIN-KO (German Commission for Hospital Hygiene and Infection Prevention at the Robert Koch Institute) - also in matters of treatment water.

Security advice

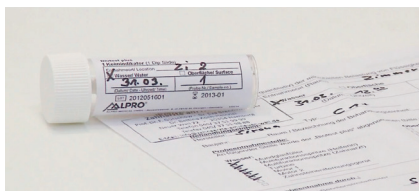
Please read these instructions carefully before starting the biofilm removal and use of Alpron / Bilpron. Please also note the Material Safety Data Sheets of the products which we will gladly provide.

For your own safety you should make sure to always wear appropriate protective clothing such as gloves, masks and goggles. In addition, you should always ensure sufficient ventilation of the working area.



Achieve treatment water according to Drinking Water Ordinance in five steps

Step 1 - Dip slide



Monitoring of the microbial load with Biotest from ALPRO. Instructions on page 6.

Step 2 - Biofilm removal



Removal of biofilm with the Biofilm-Remover-Set (BRS) from ALPRO by following the instructions on page 8. This requires approximately two hours of work per treatment unit.

Step 3 - Decontamination system



Dental units without disinfection system or Bottle System should now be equipped with one. Suitable for this purpose is the Bottle Care System (BCS) from ALPRO for the independent water supply of medical and dental treatment units. The BCS can be operated with Bilpron while Alpron can be added continuously to condition the treatment water.

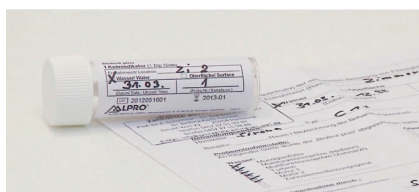
Step 4 - Intensive decontamination



According to the manufacturer's instruction of your dental unit an intensive disinfection with Bilpron should be carried out at regular intervals. Bilpron should be used once or twice a week by the weekend-method or for holiday periods.

For the conditioning / decontamination of treatment water we recommend the use of 1 % Alpron in the treatment water.

Step 5 - Monitoring



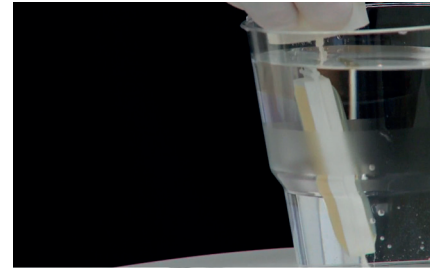
A regular monitoring of the hygienic status of the treatment water is to be carried out according to the Drinking Water Ordinance. A qualitative monitoring once a year is recommended. All results must be recorded.



For the monitoring of treatment water fill a tumbler with a proportional mix of water from the water lines, e. g. of turbines, contra-angles, hand pieces and tumbler filler.



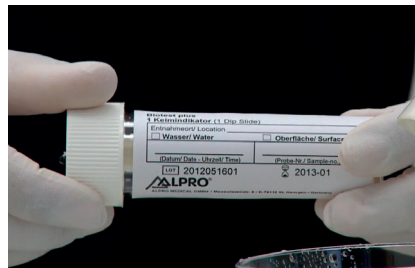
Just before use turn the dip slide counterclockwise and remove it from the tube.



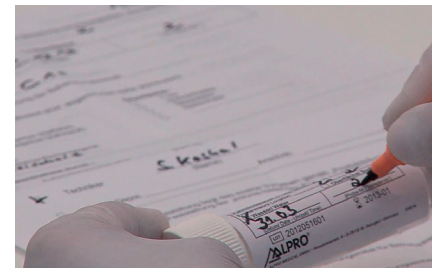
Dip the gel culture medium of the dip slide into the liquid to be examined for at least 10 seconds, so that both sides are sufficiently wetted.



Put the slide back into the tube.



Close the tube tightly.



Label the tube and the evaluation sheet.



You can carry out the evaluation yourself.

Incubation

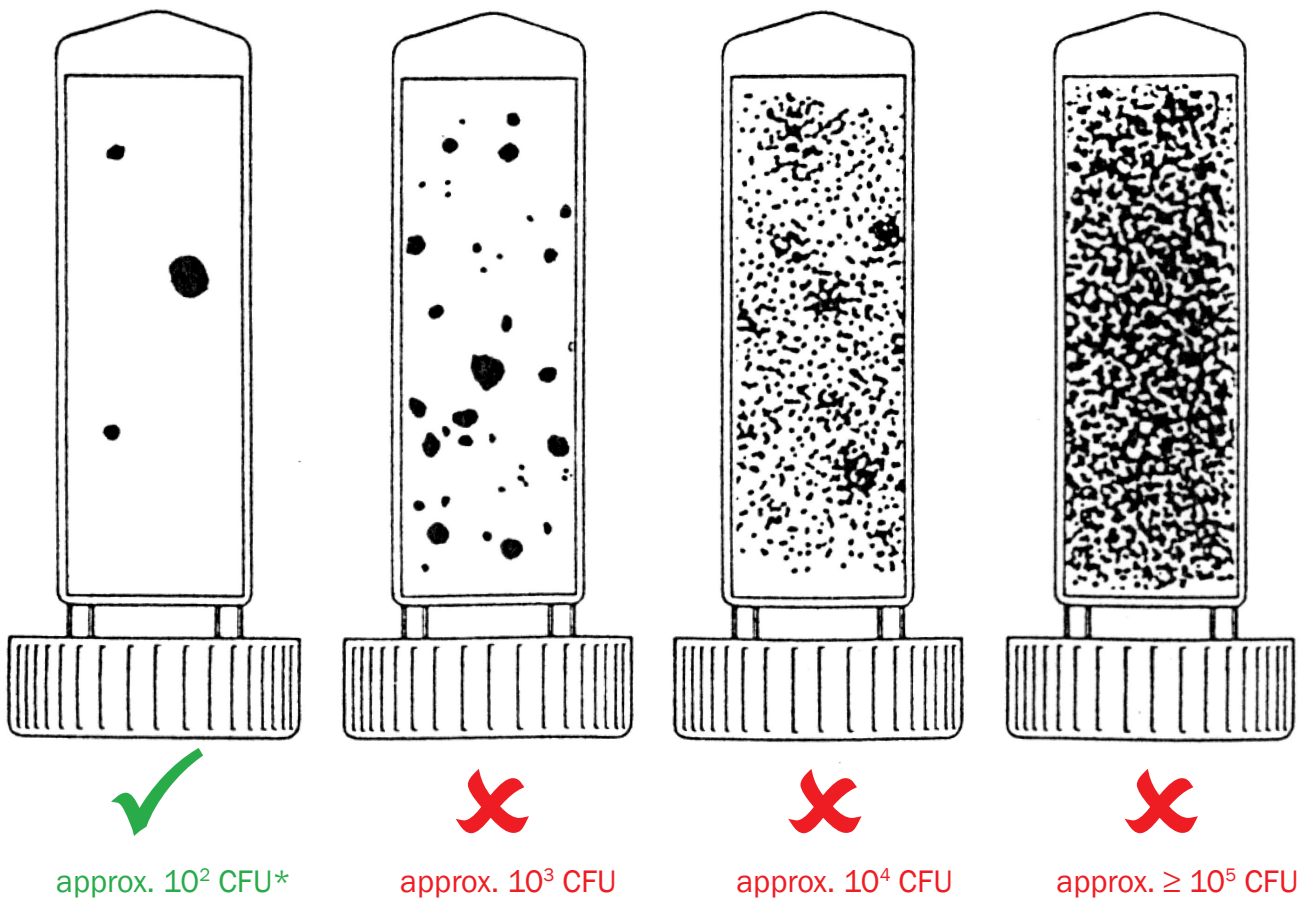
The evaluation is made after 24 hours in the incubator at 35 – 40 °C respectively **three to five days at ambient temperature.**

Due to the European Directive EN 1717 regarding medical devices also treatment water units have to meet the microbial requirements of the Drinking Water Ordinance. The limit value is 100 colony forming units per ml (CFU/ml).

The comparison of the following illustrations gives an indication about the level of contamination of the tested surface or liquid.

The microbial count of liquids is measured in CFU per ml.

The microbial count on surfaces is measured in CFU per cm².



* Limit value according to the German Drinking Water Ordinance.

Application Biofilm-Removing-System

The Biofilm-Removing-Set (BRS) provides basic cleaning (removal of biofilm) of dental unit water lines before using Alpron / Bilpron.

The Biofilm-Removing-Set (BRS) consists of the two individual products BRS PreCleaner and BRS Remover.

Note: We recommend that you read through these instructions carefully. If you have any questions or concerns please contact your Henry Schein Territory Manager who will be able to assist you.

Step 1 - Preparation of materials

Completed

☐

For the biofilm removal and the use of Alpron / Bilpron you need the following materials:

- 1 bottle Alpron
- 1 bottle Bilpron
- 1 sachet BRS PreCleaner
- 1 BRS Remover
- 1 mixing cup
- 1 dip slide

Step 2 - Dip slide

Completed

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To check if a biofilm removal is necessary, you should first carry out a dip slide test.

The instructions can be found on pages 6 and 7.

Step 3 - Preparation

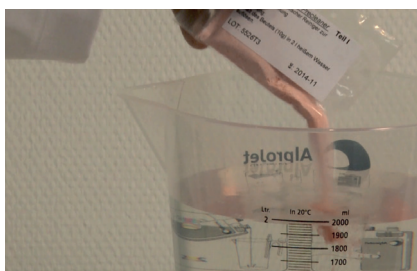
Completed

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Remove all hand pieces and contra-angles, scalers, multifunction syringes etc. completely, in order to prevent blockage of the water lines in these instruments during the cleaning process. In addition the **water inlet filter and surface filters have to be removed**. They should be replaced by new filters after the biofilm removing (before the application of Alpron / Bilpron).

Step 4 - Pre-cleaning

Completed



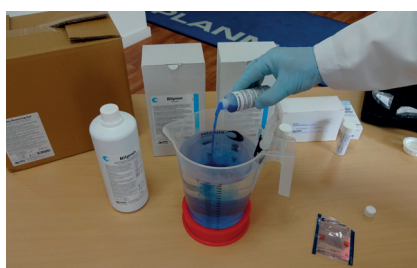
Mix one sachet of BRS PreCleaner (red granulate) with 2 litres of warm water (approx. 50 °C) until you get a clear red solution. Pour the solution into your treatment water bottle systems. Run the solution through the dental unit water lines until it comes out of the instrument lines and then leave for 15 minutes.



For flushing the whole dental unit water lines pull the instrument tubes and press the foot switch resp. press the buttons of the tumbler filler and spittoon bowl rinsing on the key panel. Continue the intermittent flushing until the reddish rinsing solution comes out clear and without any residues.

Step 5 - Main cleaning

Completed



Dissolve the contents of the BRS Remover (coloured blue) in 2 litres of hot water, approx. 50 °C – 60 °C and stir. Fill the solution (coloured blue) intermittently into the dental unit water lines (rinsing time for each instrument tube 1 minute) as described in step 4. As soon as the blue coloured solution comes out of all tube ends, the tumbler filler and the spittoon bowl without any residues* stop the process and let the solution take effect.



Contact time of the solution: according to the degree of contamination 5 – max. 20 minutes.

*If there are still visible residues coming out with the final flushing of the blue solution, repeat the cleaning with BRS Remover until the remover solution comes out of the instrument tubes and the tumbler filler **without any residues**.

Step 6 - Rinsing

Completed



After the contact time fill the bottle system with drinking water and thoroughly rinse clear all instrument tubes including the tumbler filler (for 2 - 3 minutes) with drinking water.

Step 7 - Disinfection

Completed



Fill the bottle system with Bilpron. Start the flushing with the disinfection solution Bilpron according to the instruction manual. Operate all instrument tubes until Bilpron comes visibly out of the tube ends and the tumbler filler.

Contact time: Let the ready for use solution Bilpron take effect for at least 12 hours. The best results are achieved with a contact time overnight, respectively over the weekend or during holiday periods.

Note: Only **Bilpron** is suitable for the long term disinfection / preservation (more than 4 days) of the dental unit water lines.

After the contact time simply rinse with drinking water or with Alpron 1 %, diluted with drinking water.



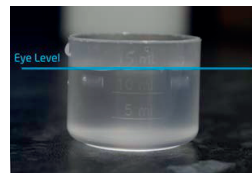
Step 8 - Adjustment of settings

Completed



Now all waterlines have been cleaned and decontaminated. For the treatment of patients we recommend conditioning the treatment water **using a Bottle Care System (BCS, e. g. with 1 % Alpron)**.

Alpron concentrate 10 mL on 990 mL water



Remarks:

We recommend carrying out an **intensive decontamination with Bilpron** (e. g. over the weekend, respectively in holiday periods). This has to be carried out in any case once or twice a week (at least overnight).

Biotest

Dip slide for the semi-quantitative monitoring of the microbial load of water and surfaces.

REF BI1-3079



Alpron

Liquid concentrate for the decontamination and disinfection for an optimal hygiene of treatment water in treatment water lines in medical and dental treatment units with and without dosing device.

REF BI1-3184 1 Ltr. Alpron



Bilpron

For the decontamination, cleaning and inhibition of biofilm formation in treatment water lines in medical and dental treatment units.

REF BI1-3181 1 Ltr. Bilpron

REF BI1-3179 Bilpron StarterSet Planmeca
(1 Ltr. Bilpron, 1 x BRS-PreCleaner,
1 x BRS-Remover, especially for
Planmeca-units)



Bottle Care System (BCS)

Treatment water system for the independent water supply to medical and dental treatment units according to EN 1717 / DIN 1988-100. Provides intensive decontamination and removal of biofilm in water lines.

REF BI1-8750 Installation set BCS



Reciprocating plunger type pump

For the injection of the products BRS, Alpron and Bilpron.

REF 8591 Reciprocating plunger type pump



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