



Quality-Water

SPECIALISTS

BIOFILM REMOVAL & ALPRON SYSTEM

Please read the enclosed instructions before using the Biofilm Removal System (BRS) or Alpron

Pay particular attention to the Data Safety Sheets as adherence to these are the responsibility of the practice (Health & Safety).

Staff should ensure compliance to the guidance for the use of goggles, gloves and masks during decontamination.

Once treatment of the Waterlines has been completed, fill in the system registration form at the back of the instruction pack and fax to **01325 733367** or post to the office address as detailed below.

Call:

01325-733368

At any time, for advice on use of the system.

PLEASE KEEP THIS FULL SET OF INSTRUCTIONS IN A PRACTICE FILE FOR FUTURE REFERENCE

Quality Water Specialists LLP
Town Farm
Front Street
Winston
Co Durham
DL2 3RH

Quality Water Specialists are the developers of the Alpron & BRS System, manufactured by Alpro Medical in Germany. When using our system please read the attached instructions and take note of the statements below.

Dental Unit Water Lines & the HTM01-05

Some confusion has been raised by the current version of the new HTM01-05

Point 6.83 States:

Self contained water bottles (Bottled Water System) should be removed, flushed with distilled or RO water and left open to the air for drying overnight. They should be stored inverted.

This is NOT the case when using the Alpron System

Point 6.84 States:

Where visual contamination is present, flushing with a suitable disinfectant followed by a thorough washing is necessary. The **manufacturer's instructions** will specify the disinfectant to be used and may also require the continuous presence of antimicrobial agents to prevent the build up of biofilms.

Point 6.86 States:

Disinfection of DUWLs should be carried out periodically. In all cases, **the manufacturer's instructions** should be consulted.

Point 19.35 States under note:

In addition to residual biocidal techniques, there are other manufacturer-specified treatments that are developed for use on DUWLs and other associated dental equipment. **REFER to the manufacturer's instructions for their correct use.**

When using the Alpron system, please read and follow the instructions supplied, this includes leaving the bottle on the system overnight. It is only removed to refill with the diluted Alpron or for Cleaning. A Biofilm Removal Protocol should always be carried out before using Alpron for the first time. This is also necessary for newly fitted dental units.

A semi quantitative Dip Slide test should be done every 3 months to show compliance to the EU Directive 98/83 for potable water. This states the recommended level for potable water is 100cfu per ml (colony forming units)

If you have any other questions please do not hesitate to call: 01325-733366 or e-mail: Richard.qws@btconnect.com

Jayne & Richard Warren. Partners: Quality Water Specialists LLP



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DIP SLIDE INSTRUCTIONS

INTRODUCTION:

We have introduced **a new media** to the Dipslide. This has been specifically manufactured in Dipslide format according to our specifications. The actual agar is called R2A and was developed some years ago to fulfil the requirement for the qualitative and quantitative enumeration of heterotrophic water borne bacteria.

This type of agar is particularly apt for the type of testing that we are advocating since its ingredients are particularly suitable for the recovery of stressed chlorine – resistant bacterial species from drinking water.

The low concentration of selected nutrients such as yeast extract, peptone, glucose and a casein compound, allows a wide spectrum of bacteria to grow without the fast growing species suppressing the slow growing species as is the case on a nutrient rich media. In addition, the inclusion of starch and pyruvate in the media enhances the recovery of injured bacteria that will then grow. Further, the combination of a lower incubation temperature and longer incubation time also adds to the merits of the results obtained from this media.

Finally, we have asked the manufacturers to incorporate a red spot dye such that any colonies will appear **red**, making the results easier to read.

STORAGE:

The Dip Slides should be stored in the dark at a temperature between 2 – 8 °C. Use before expiry date. Do not allow condensation to form to the extent that the infected slide cannot be viewed without removing from the container.

USE ONE SLIDE PER OUTLET ON YOUR CHAIR.

INOCULATION:

- Complete the label provided IDENTIFYING THE OUTLET, DATE, TIME AND UNIT REFERENCE and stick onto the outside of the tube.
- Remove the dip slide. (DO NOT HANDLE THE MEDIA OR ALLOW IT TO COME INTO CONTACT WITH ANY SURFACE. MINIMISE THE TIME THAT THE EXPOSED SLIDE IS IN CONTACT WITH THE AIR AND AVOID DRAUGHTS AND EXCESSIVE MOVEMENT WHEN TESTING).
- Run a sample of water from the chosen outlet into the plastic tube and dip the slide into the water sample 3 times. Discard the water sample.
- Replace slide in the tube and FIRMLY push into place since dehydration should be avoided during the extended incubation period.

INCUBATION:

INCUBATION TEMPERATURE ° C	MINIMUM INCUBATION TIME	OPTIMUM INCUBATION TIME
35	72 HOURS	5 – 7 DAYS
20 OR 28	5 DAYS	7 DAYS

We suggest incubation at 20°C (approx room temperature), check after 5 days but record the result obtained on Day 7. Make sure that you record the incubation temperature used and the incubation time when you record your results.

READING THE RESULTS



Few, distinct colonies.
10² c.f.u. approx

Distinct colonies covering half medium
10³ c.f.u. approx

Distinct colonies covering most of medium
10⁴ c.f.u. approx

Indistinct colonies covering most of medium
> 10⁵ c.f.u.

This is acceptable. Continue to use the Maintenance fluid

Above the advised limit of 100 c.f.u. A further BRS Removal is advised .

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PLEASE RING THE OFFICE ON **01325-733368** FOR FURTHER ADVICE IF YOU ARE NOT SURE ABOUT THE RESULTS YOU ARE GETTING. Please report any unusual results in terms of colouration seen on inoculated Dipslides such as green or brown. This indicates the probable presence of Pseudomonas sp. We can have a specific media to check this and it is important that this is dealt with quickly.

DISPOSAL OF STRIP: DIP SLIDES SHOULD BE IMMERSSED IN A SUITABLE COLD DISINFECTANT PRIOR TO DISPOSAL IN CLINICAL WASTE.

JLW FEB 09

Instructions for using the: Alpron & BRS Forte Biofilm Removal System



On Chairs with a Clean Water Bottle Setup.

- 1) Use one of the dipslides for testing the unit, **prior** to cleaning, by following the enclosed instructions. OMIT THIS FOR CLEAN AND CLEAR KITS. Use the second slide after using a 1% concentration of Alpron continuously in the clean water system for 1 week (7 Days). In each case, keep the dipslide at room temperature (away from direct sunlight) and record the result after 5 days on the registration form at the end of the instruction pack.
- 2) Remove all instruments, i.e. 3in1 syringes, turbines, motors, scalers etc, and any filters within the water lines.
This is to ensure no clogging of the fine lumen of handpieces, 3in1 syringes and filters during the Biofilm Removal procedure.
- 3) Take the Clear Bottle (Sodium Hypochlorite 100ml) and add to 900ml of 50°C warm water. Pour this solution into the empty Clean water bottle fitted on the Dental Unit. Operate all equipment to pump the solution into the water lines. You should smell the solution once it has filled the tubing (like bleach). Leave for 20-30 minutes. After 20-30 minutes, operate the equipment to flush the remaining solution through the unit. (Use all of the pre - mixed 1 litre of solution). As the bottle empties continue to flush until air is purging from the outlet, continue for 30 seconds using a pulsed action with the foot control, this will ensure any loose biofilm is forced from the water lines.
- 4) Dissolve the contents of the BRS Forte-Remover sachet in 2 litres of HOT water (50°- 60°C). Now add the contents of the BRS Forte-Activator (20ml) into the 2 litres of BRS Forte-Remover. Stir well, and fill Clean Water Bottle with solution and operate all instruments until you see a blue coloured solution coming from each outlet. Leave the solution for 20 minutes. After this time, pump all the remaining solution through the waterlines. As the bottle empties continue to flush until air is purging from the outlet, continue for 30 seconds using a pulsed action with the foot control, this will ensure any loose biofilm is forced from the water lines. This will have removed the biofilm; you are now ready to use the maintenance solution – Alpron.

N.B If the post cleaning dip slide result shows a fail, this is probably due to major biofilm build up and a recleaning will be required. To do this a Clean and Clear kit needs to be purchased and the cleaning process repeated.

- 5) Add 10ml of Alpron to 990ml of clean water and fill the clean Water Bottle System, operate equipment until half of the bottle contents have gone through the unit , include the tumbler filler if this is connected into the unit. This will remove any residual chemicals and your chair is now ready for use. Reattach your handpieces etc. **DO NOT DRAIN THE BOTTLE AT THE END OF THE DAY OR AT WEEKENDS. LEAVE DILUTED ALPRON IN THE SYSTEM CONTINUOUSLY. HTM01-O5 CLEARLY STATES '.....OR FOLLOW THE MANUFACTURER'S INSTRUCTIONS'.** (See next page for further visual instruction with regard the use of Alpron solution.)

N.B For ease of use make up 5 litres of active Alpron solution using the measuring jug and fill the Storage Canister. Attach the Drain Tap. This will allow easy refilling of your Clean Water Bottle during the day. Diluted Alpron can be stored for up to 4 weeks in the canister supplied. Label the container with the date and use all of the mixed solution. Rinse before refilling with newly diluted solution and redate.

- 6) Each morning, prior to use on patients, flush each line for 30 seconds to refresh the Alpron solution in the system. Always flush between patients for 15 seconds, this is to ensure no oral bacteria are transferred between patients, as anti-retraction valves have been shown to fail on a regular basis, so should be checked at least every month.
- 7) If any of your chairs is to be out of use for a short time, keep the Alpron solution in the system and flush a little through each day to ensure fresh solution is in the system. For longer periods of downtime – please ring for advise, as we do have a solution.
- 8) If your unit has a built in water decontamination system – phone 01325-733368 or Fax 01325-733367 for special instructions prior to use.

Please note if you do not have a clean water bottle system, we can advise as to where they are available. Just ring and ask to speak to Richard.

TO MAKE A 1% ALPRON SOLUTION

You need: Bottle of undiluted Alpron solution
Water - preferably distilled
5 litre storage canister
2 litre (2000ml) measuring jug
Funnel



For **2 litres** of 1% Alpron solution:

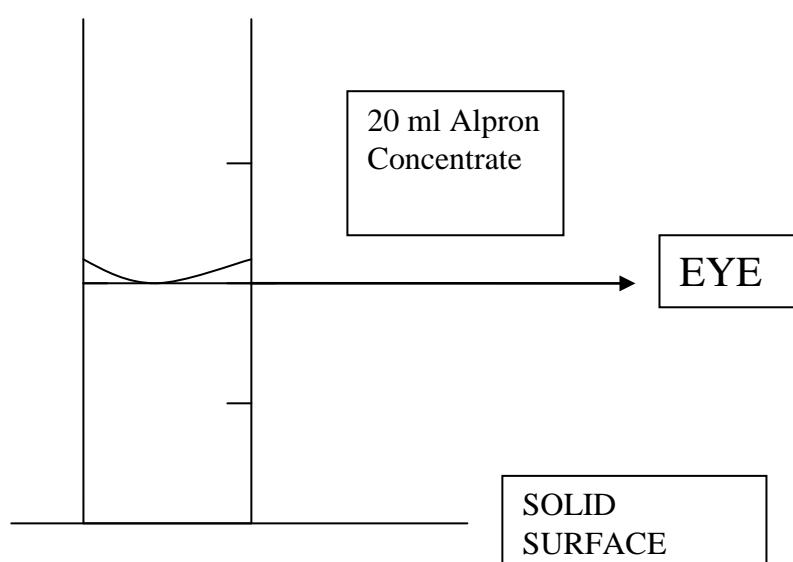
1. Measure out 20 ml of undiluted Alpron using the graduated bottle cap and pour this into the measuring jug.
2. Carefully fill the jug with water, preferably distilled, exactly to the 2 litre (2000ml) mark and stir to mix.

For **1 litre** of 1% Alpron solution:

1. Measure out 10ml of undiluted Alpron using the graduated bottle cap and pour this into the measuring jug.
2. Carefully fill the jug with water, preferably distilled, exactly to the 1 litre (1000ml) mark and stir to mix.

REMEMBER: THERE IS ONLY ONE WAY TO MEASURE ACCURATELY

- Use the graduated cap from the top of the Alpron concentrate bottle.
- Put the cap onto a flat surface
- Fill until the bottom of the meniscus is on the 20ml mark.



N.B It is important to measure the volumes accurately in order to ensure that the correct concentration of Alpron solution is being maintained.

Frequently Asked Questions

1) Do I need to repeat the Biofilm Removal Stage ?

No, under normal conditions you will need to use the biofilm removal kit once providing an accurately measured 1% Alpron solution is in the lines **at all times**.

2) Do I use Alpron every day ?

Yes, you use Alpron on a continuous basis in the clean water bottle fitted to the chair.

3) When do I use the dip slides ?

You use the Dip Slides in the kit to check the condition of your unit's water before and after cleaning. Thereafter you need to audit each unit every 3 months to ensure compliance.

4) Will it harm my patients ?

No, the Alpron solution is physiologically harmless

5) Can I use Tap Water to Mix Alpron ?

Yes, but distilled is better, if you can

6) Will it affect my Clinical Work ?

No, Alpron has been in use since 1995, no reported cases of any interference to any clinical work

7) How long can I store mixed Alpron for ?

Alpron is safe to store for up to 4 weeks in the storage bottle supplied. See instructions.

8) I use distilled water so I won't have a problem ?

Distilled water will not stop a Biofilm forming you will need to treat your unit to ensure drinking quality water

9) I have a new unit so I do not need to use the Biofilm Remover ?

A Biofilm is formed within hours, so when new units are wet tested almost certainly a Biofilm will be present when the unit is installed into your practice. So we recommend even new units have a complete Biofilm removal