



Quality-Water
SPECIALISTS

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

Once treatment of the Waterlines has been completed

Call:

01484-722065

to apply for your
Waiting Room Certificate & Continuing Audit Pack

Dip slide Test at QWS Office 15/01/2001



Tap Water



Dental Unit Water Line

The Dip Slides illustrate above show the difference between Tap Water and the untreated water within most dental water lines. The Dental Unit clearly does NOT conform to the current E.U guidelines. By using our system, we can produce drinking quality water from your Dental Unit such that results post-treatment will be as per the Tap Water, above. The system is easy to use and will maintain potable water from your unit.

The BRS-Forte (biofilm removal kit) and Alpron (maintenance solution) is only £70.00 plus vat per chair. The on-going costs are minimal only FROM 25p per, day per, litre per chair

We recommend that after 3 months you check your water quality with a Dip Slide. This will ensure you can see that the unit is performing to standard. If you test and find a raised count on your dip slide, please contact us for advice on:

Phone 01484-722065 – Ask for Richard or Jayne Warren

N.B DIP SLIDES CAN BE PURCHASED SEPERATELY FOR THE ASSESSMENT OF WATER QUALITY PRIOR TO TREATMENT AND FOR ROUTINE MONITORING OF THE SYSTEM DURING USE.



Quality-Water SPECIALISTS

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 fulfill 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



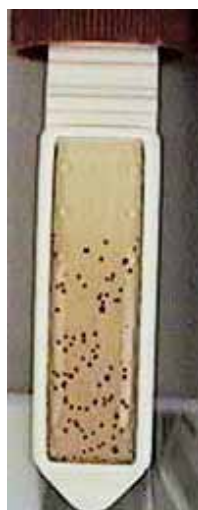
Few, distinct colonies.
10² c.f.u. approx

This is acceptable.
Continue to use the Maintenance fluid



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

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



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

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



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

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

PLEASE RING THE OFFICE ON **01484 722065** 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 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 DISINFECTANT OR STERILISED PRIOR TO DISPOSAL.

NOW YOU HAVE READ THIS, REPLACE ANY OLD INSTRUCTIONS WITH THIS SHEET. EXTRA COPIES CAN BE SENT IF NEEDED. PLEASE ASK.

JLW JULY 2004

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



On Chairs with a Clean Water Bottle Setup.

- 1) Using the Colony Forming Units (c.f.u.) Dip Slides. – Follow the enclosed instructions. Take the first Dip Slide and use prior to the BRS-Forte Treatment. Use the second slide after using a 1% concentration of Alpron continuously in the clean water system for 1 week (7 Days).
- 2) Remove all instruments, i.e. 3in1 syringes, turbines, motors, scalers etc.
Plus any Filters within the water lines.
This is to ensure no clogging of the fine lumen of handpieces and 3in1 syringes during the Biofilm Removal procedure.
- 3) Take the Clear Bottle (Sodium Hypochlorite 100ml) add to 900ml of 50°C warm water. Add to Empty Clean water bottle fitted on the Dental Unit. Operate all equipment to pump the solution into the water lines. Leave for 20-30 minutes. After 20-30 minutes, operate the equipment to flush the remaining solution through the unit. 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. (Use all of the mixed 1 litre of solution).
- 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.
- 5) In cases of major Biofilm problems repeat steps 2,3 & 4, this is normally not required, check by using a dip slide.
(A second BRS-Forte treatment kit will need to be purchased).

- 6) Add 10ml of Alpron to 990ml of clean water and fill the clean Water Bottle System, operate equipment until the Alpron solution is seen coming from the tub ends – leave for at least 60 minutes. For best results leave over night.
- 7) For ease of use make up 5 litres of active solution using the measuring jug and fill the Storage Cannister. Attach the Drain Tap. This will allow easy refilling of your Clean Water Bottle during the day. If necessary, Alpron can be stored for up to 4 weeks in the cannister supplied.
- 8) In the morning after your first treatment with the BRS-Forte, operate each instrument water supply for about 3 minutes, and operate the tumbler filler 10 times (if connected into the system). Now all the waterlines have been decontaminated, cleaned, and filled with the correct concentration of Alpron for the treatment of patients – re-attach your usual handpieces, filters etc. Each morning prior to use on patients flush each line for 30 seconds. 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
- 9) The constant use of a 1% concentration of Alpron in your Clean Water system will ensure no further Biofilm problems provided you always refill your clean water bottle with a 1% solution of Alpron – Use the Alpron Storage Cannister to make up to 5 litres of ready to use Alpron. N.B If the dental unit is out of action for an extended period of time so that the 1% Alpron solution has not been routinely flowing through, it is feasible that a Biofilm could start to reform. In these circumstances, a further BRS-Forte treatment may be advised. Use Dip Slides to check if a bacterial load has built up during the chairs down time.
- 10) Please ask about our Certification program for your practice.
- 11) If your unit has a built in water decontamination system follow the manufacturers instructions – For further information phone 01484-722065 or Fax 01484-721218

Please note if you do not have a clean water bottle system, we can provide one at a reasonable cost – fitting is at your own cost.



TO MAKE A 1% ALPRON SOLUTION

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

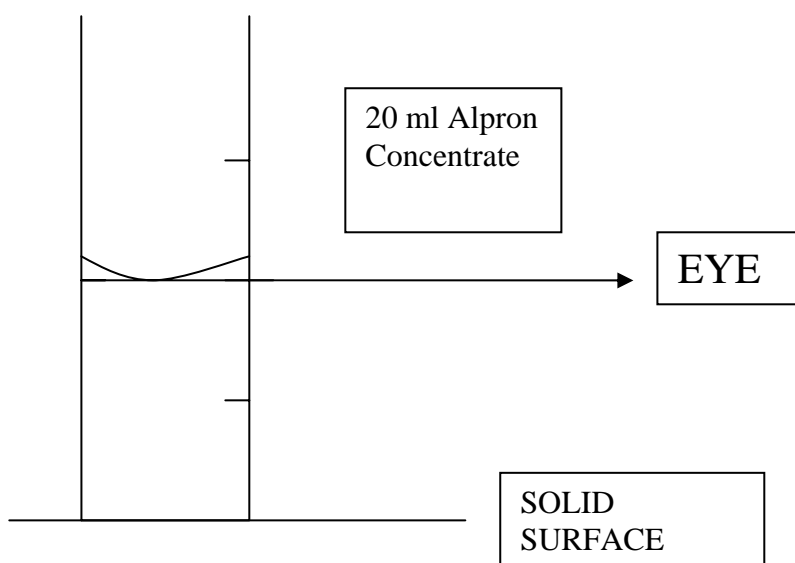
For **2 litres** of 1% Alpron solution:

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.

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.

P.T.O



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 and once only

2) Do I use Alpron every day ?

Yes, you use Alpron on a continuous basis in the chairs clean water bottle

3) When do I use the dip slides ?

You use the Dip Slides to check the condition of your units water every 3 months

4) Will it harm my patients ?

No, It is physiologically harmless

5) Can I use Tap Water to Mix Alpron ?

Yes, but distilled is better if you can

7) Will it affect my Clinical Work ?

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

8) How long can I store mixed Alpron for ?

Alpron is safe to store for up to 4 weeks in the opaque bottle supplied in the kit

9) 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

10) 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

1 Substance/ preparation and company designation

Trade name : **BRS-NaOCl-solution**
Address : ALPRO DENTAL-PRODUKTE GmbH
Mooswiesenstr. 9, D- 78112 St. Georgen/ Schwarzwald
Tel.: ++49 77 25/93 92 -0
Fax: ++49 77 25/93 92 91
Date of issue : September 27, 1999

2 Composition/ information to ingredients

Chemical characteristic: Sodium hypochlorite solution (1 – 2 % active chlorine)
CAS-no.: 7681-52-9
EG-no.: 017-011-00-1
EINECS-no.: 231-868-3

Dangerous substances contained:	Weight %	Code letter	Warning
ClONa	1 – 5 %	C	R 31-34

3 Possible dangers

If used as directed no particular dangers.
Particular warnings for people and environment: In case of contact with acid development of toxic gases.

4 First aid measures

Inhalation : Sufficient fresh air supply and consult a physician as a precaution.
Contact with skin : Wash off with water and soap immediately and rinse well.
Contact with eyes : Rinse eyes with running water with open palpebral fissure for some minutes and consult a physician.
Ingestion : Rinse mouth and drink plenty of water, do not induce vomiting, consult a physician.

5 Fire-fighting measures

Suitable extinguishing means : Adjust fire-fighting measures to the environment.
Dangers : In case of fire dangerous gases might develop (chlorine, hydrogen chloride, dichloroxide)
Further indications : Product itself does not burn.

6 Measures in case of accidental release

Precautions for persons : Care for sufficient ventilation, danger of sliding because of leaked/ spilled product, avoid contact with eyes and skin.
Precautions for environmental care : Do not let the product reach the canalization/waters, underground/ earth.
Methods for cleaning/ taking up : Take up with liquid binding materials (sand, silicious earth, acid binding agent, universal binding agent). Use neutralizing agent. Care for sufficient ventilation.

7 Storage and handling

Handling: Store at a cool and dry place in firmly closed containers. Care for sufficient ventilation, open and handle containers carefully.
Storage: Only store in original containers. Do not store together with acids or acid salts. Protect from light, heat and direct sunshine.

8 Exposure controls and personal protection

Further indications for the arrangement of technical equipment: If used as directed no further indications necessary. Components with limiting values to supervise at work:

Substance description:	Kind:	Value:	Unit:
Chlorine	MAK	1,5	mg/m ³
		0,5	ml/m ³

Personal protection equipment

Respiratory protection : suitable respiratory protection
Eye protection : tightly closing safety goggles
Hand protection : rubber gloves
Body protection : wear lye-resistant protection suit

9 Physical and chemical characteristics

Appearance : liquid
Colour : clear/ slightly yellowish
Smell : slightly of chlorine
Boiling point/ range : not applicable
Melting point/range : -
Flash point (DIN, TRbF) : not applicable
Density : 1,015 - 1,025 g/cm³ (20°C)
Solubility in water : unlimited
pH-value : 10 – 11 (20°C)
Viscosity, dynamic : -
Refractive index nD : 1,3374 – 1,3380 (20°C)

10 Stability and reactivity

Conditions to be avoided : Thermically autokatalyzed shifting to NaClO₃ and NaCl
Substances to be avoided : Acids, reduction agents. Reacts with acids and acid salts under development of chlorine.
Dangerous decomposition products : hydrogen chloride, chlorine

11 Toxicological information

Primary irritation : Irritating effect on skin and on mucous membranes; danger of serious eye diseases.
Sensitizing : No sensitizing effect known.
Additional indications : In case of release of chlorine heavy inflammatory irritations or cauterizations of the higher and lower respiratory tracts might appear.

12 Ecological information

General indications : Water endangering class 1 (self): lightly water endangering;
Do not let the product reach the ground water or the canalization. It must not reach the ground water, waters or the canalization.
It must not reach waste waters or the canalization undiluted or unneutralized.
Other indications : Acute fish toxicity: LC50/96h, Pimephales promelas 5,9 mg/l;
Inhibition of the activity of waste water bacteria 40 – 100 mg Cl₂/l;
Harmful effect on fish, plankton and settled organisms by pH-shift.

13 Refuse disposal method

Remaining quantities : Diluted to application concentration dump into a sewage plant for orderly treatment of waste waters.
Packing : According to the official prescriptions of the country or of the region.

14 Information for transport

No dangerous product in the sense of the transport regulations.

15 Regulations

Label: BRS-NaOCl-solution
According to EC directives/GefStoffV the product is no dangerous product.
Water endangering classification: WGK 1 (self-classification)

16 Other data

The above information is given according to the best of our knowledge and belief.
The data is partially taken from the literature (different sources). For further information please contact:

ALPRO DENTAL-PRODUKTE GMBH
Mooswiesenstr. 9, D-78112 St.Georgen/Schwarzwald
Tel.: ++ 49 77 25/93 92-0
Fax: ++ 49 77 25/93 92 91
Email: alpro@alpro-dental.de
Internet: www.alpro-dental.de

EC Material Safety Data Sheet according to 91/ 155/ EWG

1 Substance/ preparation and company designation

Trade name : **BRS forte Remover**
Address : ALPRO DENTAL-PRODUKTE GmbH
Mooswiesenstr. 9, 78112 St. Georgen/ Germany
Tel.: ++49 77 25/93 92 -0
Fax: ++49 77 25/93 92 91
Date of issue : May 4th, 2001

2 Composition/ information to ingredients

Mixture of citric acid with non-ionogenic tensides and dye.

Dangerous substances contained:	Weight %	Code letter	CAS-no.	Warning
Citric acid anhydrite	> 70 %	Xi	77-92-9	R 36/38
Sodiumcumolsulfonate	< 1 %	Xi	28348-53-0	R 36/38

3 Possible dangers

Xi
R 36/38
Irritating
Irritates eyes and skin

4 First aid measures

Contact with eyes: Rinse eyes long enough with plenty of water with open eyelids.
Consult a medical specialist.
Contact with skin: Wash skin with plenty of water and soap.
After inhalation: If long-lasting troubles occur, consult a physician.

5 Fire-fighting measures

Suitable extinguishing means: Foam, extinguishing powder, CO₂ or water spray jet
Non-suitable extinguishing means: No one known
Further indications: Product itself does not burn.

6 Measures in case of accidental release

Precautions for persons: Avoid contact with the substance.
Precautions for environmental care: No special measures required.
Methods for cleaning: Take up dry and follow the method for disposal as it is described in point 13.
Clean up afterwards

7 Storage and handling

Storage: Store container keeping it closed. Do not expose to sunlight and avoid strong warming.

Work hygiene, handling: Avoid the forming of dust.

8 Exposure controls and personal protection

Components with limit values to supervise at the working place are not contained.

Personal protection equipment:

Breathe protection: Not necessary
Eye protection: Safety goggles
Hand protection: Not necessary
Instruction for the work hygiene: Avoid contact with eyes and skin

9 Physical and chemical characteristics

Appearance: powdery
Colour: light-blue
Smell: characteristic
pH-factor (80 g/l H₂O): 1,5 – 2,0 (20° C)
Boiling point/ range: -
Melting point/range: -
Flash point (DIN, TRbF): -
Density: -
Solubility in water (20° C): 1.330 g/l
Refractive index (80g/l H₂O) nD: 1,3418 – 1,3433 (20° C)
Optical rotation αD: -
Conductivity (80 g/l H₂O): 5500 – 6000 µS/cm (20° C)

10 Stability and reactivity

Conditions to avoid: Strong heating
Dangerous decomposition products: No one known, if use as directed.
Additional information: Hygroscopic

11 Toxicological information

LD 50, oral, rat: -
Further information: -
LD 50, dermal, rabbit: -
Sensitizing: No sensitizing effect known.

12 Ecological information

Biological degradability: If lead appropriately into a biological purification plant, no disturbance of the degradability is to be expected.

Water endangering classification :WGK 1 (self-classification): lightly dangerous to water

13 Refuse disposal method

According to the legal federal state or local regulations.

14 Information for transport

No dangerous product according to the transport regulations.

15 Regulations

Label: **BRS forte-Remover**
Danger symbol: Xi
Danger description: Irritating
Danger clauses: R 36/38 Irritates eyes and skin
Precautions: S 26 In case of contact with eye rinse thoroughly with water and consult a physician.
S 37/39 Wear suitable protective gloves and safety goggles/ face protection at work.

16 Other data

The above information is given according to the best of our knowledge and belief.
The data is partially taken from the literature (different sources). For further information please contact:

ALPRO DENTAL-PRODUKTE GMBH
Mooswiesenstr. 9, D-78112 St.Georgen/Schwarzwald
Tel.: ++ 49 77 25/93 92-0
Fax: ++ 49 77 25/93 92 91
Email: alpro@alpro-dental.de

EC Material Safety Data Sheet according to 91/ 155/ EWG

1 Substance/ preparation and company designation

Trade name : **Alpron_{mint}** **H**
Address : ALPRO DENTAL-PRODUKTE GMBH, Mooswiesenstr. 9
D - 78112 St. Georgen, GERMANY
Tel.: ++ 49 77 25/ 93 92 -0
Fax: ++ 49 77 25/ 93 92 91
Date of issue : November 15, 2000

2 Composition/ information to ingredients

Concentrate for decontamination of water lines based on edetin acid, tosylchloramide sodium, phenylalanine, perfume and flavour substances in water.

Dangerous substances contained:	Content	Code letter	Warning
Sodium-p-toluolsulfonechloramide	< 0,2 %	Xi	R 36/37/38
Ethylendiaminetetra acetic acid-disodium salt 1 – 5 %		Xn	R 22

3 Possible dangers

If used as directed there is no particular danger.

4 First aid measures

Contact with eyes : Rinse long enough with plenty of water with open eyelids.
Consult a physician.
Contact with skin : Wash skin with plenty of water and soap.

5 Fire-fighting measures

Suitable extinguishing means : Foam, extinguishing powder, CO₂, jet of water
Extinguishing means unsuitable for safety reasons : Are not known
Further indications : Product itself does not burn.

6 Measures in case of accidental release

Precautions for persons : Avoid contact with eyes and skin.
Precautions for environmental care : Do not make the product reach the sewage system undiluted.
Methods for cleaning/taking up : Take up with liquid binding material (sand, peat, sawdust). Fill into marked, lockable containers.

7 Storage and handling

Storage : Store container keeping it tightly closed. Avoid direct sunlight and strong heating up.
Work hygiene, handling : Follow the usual precautions in handling with chemicals.

8 Exposure control and personal protection

Components with limit values to supervise at the working place are not contained.

Personal protection equipment:

Breath protection : not necessary
Eye protection : safety goggles
Hand protection : not necessary
Indications for working hygiene : wash hands after having finished work.

9 Physical and chemical characteristics

Appearance : liquid
Colour : colourless
Smell : characteristic (mint)
pH-factor (10 g/l H₂O) : 5,5 – 6,5 (20°C)
Boiling point/range : begins to boil at approx. 100°C
Melting point/range : -
Flash point (DIN, TRbF) : > 55°C
Specific gravity : 1,015 – 1,025 g/cm³ (20°C)
Solubility in water : easily soluble (20°C)
ethanol : soluble
hexane : -
Refraction index n_D : 1,363 – 1,365 (20°C)
Optical rotation α_D : -
Conductivity : 13.500 – 16.000 µS/cm (20°C)

10 Stability and reactivity

Conditions to avoid : Strong heating up.
Substances to avoid : If used as directed no one known.
Dangerous decomposition products : None if used as directed.

11 Toxicological information

LD 50, oral, rat : -
Further information : -
LD 50, dermal, rabbit : -
Sensitizing : No sensitizing effect known.

12 Ecological information

Biodegradability : If dumped into a biological sewage plant properly no disturbances in the biodegradability must be expected.
Precautions : Do not let the concentrate reach water, waste water or earth.

13 Refuse disposal method

According to the legal federal state or local regulations.

14 Information for transport

No dangerous product according to the transport regulations.

UN-No. : -
GGVSee/IMDG-Code : -
ICAO/IATA-DGR : -
GGVE/GGVS : -
RID/ADR : -
ADNR : -

15 Regulations

Label : **Alpron_{mint}** **H**
According to GefStoffV product must not be labelled by duty.

16 Other data

The above information is given to the best of our knowledge and belief.
The data is partially taken from the literature (different sources).

Contact : ALPRO DENTAL-PRODUKTE GMBH
Mooswiesenstr. 9, D-78112 St.Georgen/Schwarzwald
Tel.: ++ 49 77 25/93 92-0
Fax: ++ 49 77 25/93 92 91
Email: alpro@alpro-dental.de
Internet: www.alpro-dental.de

This is to certify that

Please apply for your waiting room certificate

Dental Surgeon

*actively maintains a
quality water supply to
the dental equipment*

Certificate valid:

1st January 2002 to 31st December 2002

This annually reviewed certificate is valid so long as the Alpron maintenance procedures are strictly adhered to and are recorded



Quality-Water
SPECIALISTS

34 Well Green Lane,
Hove Edge, Brighouse
West Yorkshire HD6 2NS

Telephone 01484 722065

Fax 01484 721218

Jayne Warren BSc Hons Medical Sciences
Specialising in Medical Microbiology
Director

Alpron