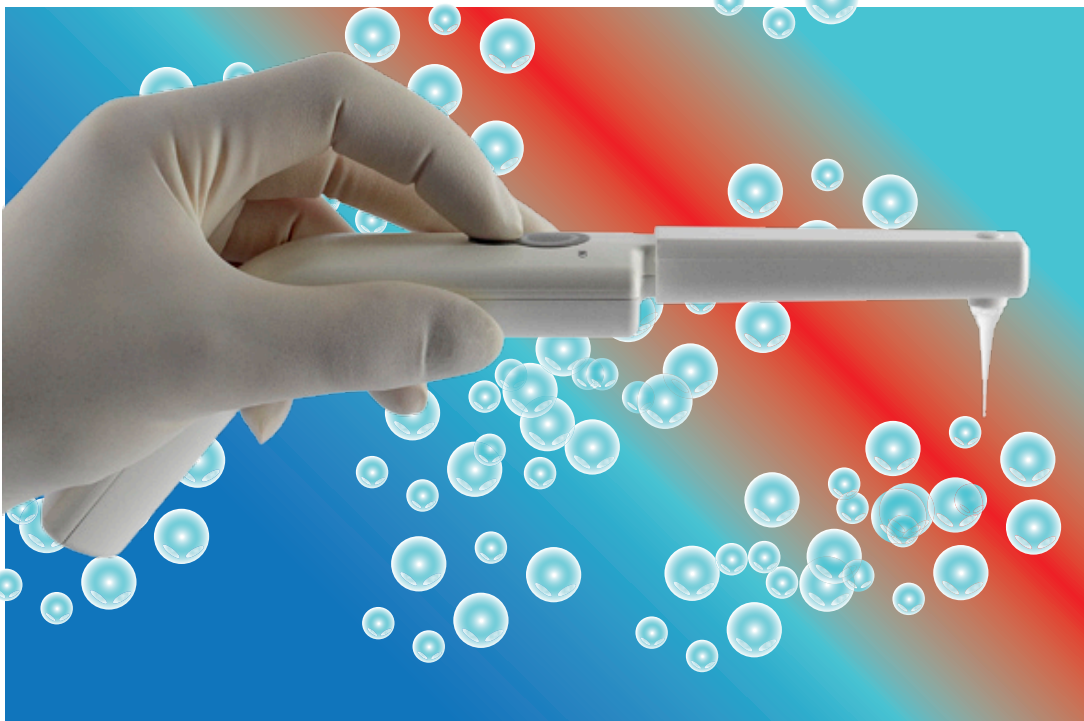


Foto₂San



Treatment guidelines

Tips and advice

Engelsk

CMS Dental ApS
Njalsgade 21 G
2300 Copenhagen S
Denmark

www.cmsdental.com
info@cmsdental.dk
Phone: +45 32 57 30 00
Fax: +45 32 57 10 23

 **dental**
Our innovation
Your Success

Practical FotoSan treatment

FotoSan is used in the treatment of infections in the oral cavity in cases where:

1. You have access to and can apply the photosensitizer (FotoSan Agent) in contact with pathogenic microorganisms.
2. The light can activate the photosensitizer (FotoSan Agent).

Three different viscosities of FotoSan Agent

FotoSan Agent is available in 3 different viscosities with a concentration of 0.1 mg/ml of the active ingredient Toluidine Blue. Choose a viscosity of the FotoSan Agent which is best suitable for the actual treatment.

Agent LOW - suitable for applications in root canals.

Agent MEDIUM – suitable for treating gingivitis, applications in periodontal pockets or cavities with profound carries.

Agent HIGH - suitable for applications in wide periodontal pockets, peri-implantitis, peri-coronitis or periodontal surgery.

Three different tips

There are 3 different types of tips included in the FotoSan kit:

1. BLUNT tip for surface treatment.
 2. ENDO tip for root canal treatment. The tip is conic and ends with a diameter of 0,5 mm.
 3. PERIO tip for periodontal pockets and furcation treatment. The tip is cylindrical with a diameter of 1 mm where of the final 5 mm has a roughened surface.
- The unique design permits increased light through the tip and a wider spreading in the periodontal pocket. All tips are for single use only!

Two different FotoSan Agent packaging

You can order FotoSan Agent in:

1. Vials of 6 ml
2. Syringes of 1,2 ml

Please find the reference number at backpage.

Endodontic treatment

Pulpitis



Clean and shape the root canal as usual, using copious amounts of sodium hypochlorite or similar.



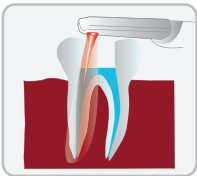
Step 1

Dry the root canal with paper points.



Step 2

Choose your FotoSan Agent viscosity, apply in syringe and use an endo needle suitable for rinsing and fill the canal. Avoid creating air bubbles: Use a small size hand file at working length and “stir” a couple of times to disperse any air bubbles that may occur.



Step 3

Insert the endo tip until you feel resistance and activate the light 30 seconds (large button). The light will stop automatically. Apply 30 seconds in the root canal in cases where the tip reaches approximately 2/3 down the root canal. If the tip can only be placed approximately 1/2 down the root canal, use 2 x 30 seconds.

In cases of apical clearance apply an additional 2 x 30 seconds. With apical periodontitis and/or abscess apply additionally 30 seconds using the BLUNT tip from the gingival side positioned at apex.

If the tip only reaches approximately halfway down the root canal.	Light for 2 x 30 seconds per treatment.
In cases of apical clearance.	Light for 2 x 30 seconds per treatment followed by additionally 30 seconds using the blunt tip pressed at the gingival tissue positioned at apex lingual or palatal.



Step 4

Rinse and dry root canal. Repeat for other canals.

TIPS! In cases where it is difficult to access the canals, the ENDO tip may be positioned in the canal without the light being attached. Exposure is achieved by holding the LED as close as possible to the ENDO tip during activation. Discoloration of the pulp chamber may occur during endodontic treatment. Once sealed, it will disappear. Discoloration can be removed using EDTA prior to the actual filling of the root canal.

Gingival and mucosa treatment

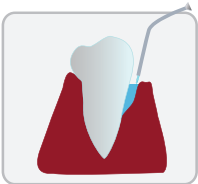
Gingivitis

In case of gingivitis perform conventional scaling. The FotoSan equipment is used with a cover to which the BLUNT tip is attached.

Apply FotoSan Agent MEDIUM or HIGH at the gingival edge, both the facial, lingual and palatal sides. Finally you light with the FotoSan equipment for 10 seconds per side.

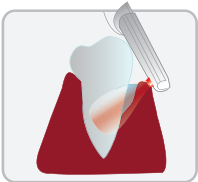
Peri-coronitis/herpes labialis/aphtae

In case of peri-coronitis/herpes labialis/aphtae apply plenty of the FotoSan Agent HIGH. Then light with the FotoSan equipment for minimum 30 seconds. Depending of the ratio of inflammation plus the extension of i.e. herpes labialis wounds, light another 2 or 3 x 30 seconds.



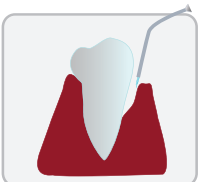
Step 1

Choose your FotoSan Agent viscosity, apply in syringe and use a blunt needle suitable for the purpose and apply FotoSan Agent to the inflamed area.



Step 2

Light with the FotoSan equipment using the BLUNT tip for 10 seconds at the mucosa, keeping firm contact with the surface of the gingiva.



Step 3

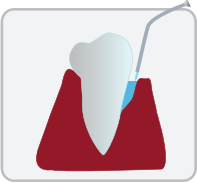
Rinse with saline.

Periodontal treatment

Periodontitis/Periodontitis apicalis/ Furcation/Peri-implantitis

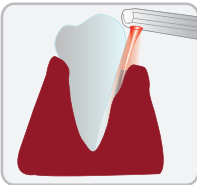


Perform conventional scaling and root planning. The FotoSan equipment is used with a cover to which either a PERIO tip or a BLUNT tip is attached.



Step 1

Choose your FotoSan Agent viscosity, apply in syringe and use a blunt needle suitable for the purpose and fill the periodontal pocket or furcation with gel.



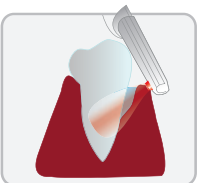
Step 2A

For deep periodontal pockets (>5 mm):
Start lighting for 10 seconds using the PERIO tip attached, as deep in the periodontal pocket or furcation as possible. Use 4 x 10 seconds in each periodontal pocket or furcation, 1 x 10 seconds for each surface, depending on the depth of the periodontal pocket or furcation and the degree of inflammation.

Depth of periodontal pocket	Treatment time per surface
Up to 4 mm	10 seconds
5-7 mm	20 seconds
8-9 mm or > 8-9 mm	30 seconds

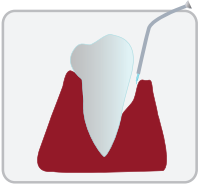
If the entrance of the periodontal pocket or furcation is very narrow use the ENDO tip instead. Remember that the PERIO tip emits four times more light compared to the ENDO tip. Therefore use the PERIO tip whenever possible.

NOTE: For shallower periodontal pockets (<4mm step 2A may not be necessary)



Step 2B

Continue by using the BLUNT tip for 10 seconds on the outside of the pocket, apply both to the oral and facial side of the tooth. Keep the tip in firm contact with the gingival surface.



Step 3

Rinse the periodontal pocket or furcation with saline. In case of apical periodontitis and/or apical abscess light additional 30 seconds from the gingival side using the BLUNT tip positioned at the apex.

In cases of apical clearance.

Light 2 x 10 seconds in each periodontal pocket/furcation. Light 2 x 30 seconds per treatment followed by additionally 30 seconds using the blunt tip in firm contact with the gingival tissue positioned at apex at the lingual or palatal side.

Caries treatment



The FotoSan equipment may be used to decontaminate a thin layer of decayed dentine. Especially useful when caries is in proximity to the pulp and risk of capping is a concern. Excavate as much of the decayed dentine as possible.



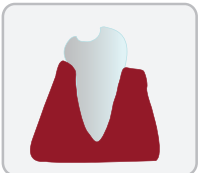
Step 1

Choose a FotoSan Agent viscosity, apply in syringe and use a blunt needle suitable for the purpose. Fill the entire cavity with FotoSan Agent MEDIUM or HIGH viscosity.



Step 2

Light for 10 seconds with the BLUNT tip attached keeping contact with FotoSan Agent.



Step 3

Rinse and dry the cavity.

TIPS!

If the cavity is very narrow, the PERIO tip may be used.

Important information

General treatment principles

- ✓ *Longer light exposure destroys more bacteria.*
- ✓ *FotoSan Agent is also available in prefilled syringes – ready for use.*
- ✓ *The time settings in this guide are average recommendations.*
- ✓ *Acute infections or acute exacerbations in chronic conditions may benefit from treatment with double exposure time and/or repeating the treatment.*
- ✓ *The FotoSan Agent may be colorless prior to exposure. When exposed to oxygen and activated it will become blue in color.*
- ✓ *Shake FotoSan Agent before use.*
- ✓ *The FotoSan Agent stains textiles if spilled.*
- ✓ *If the light gets too hot, we recommend you to change the cover.*
- ✓ *All tips are for single use only!*

Accessories

Item No.	Description
HPDLCOV1/10	10 pcs. autoclavable covers
HPDLTIP1/100	100 pcs. ENDO tips – single use
HPDLTIP2/100	100 pcs. BLUNT tips – single use
HPDLTIP3/100	100 pcs. PERIO tips – single use
13601	6 ml vial FotoSan Agent LOW
13606	6 x 6 ml vial FotoSan Agent LOW
13603	5 x 1,2 ml syringe FotoSan Agent LOW
13701	6 ml vial FotoSan Agent MEDIUM
13706	6 x 6 ml vial FotoSan Agent MEDIUM
13703	5 x 1,2 ml syringe FotoSan Agent MEDIUM
13801	6 ml vial FotoSan Agent HIGH
13806	6 x 6 ml vial FotoSan Agent HIGH
13803	5 x 1,2 ml syringe FotoSan Agent HIGH
13850	6 x 6 ml vial FotoSan Agent, Assorted: 2 x HIGH, MEDIUM, LOW
13855	5 x 1,2 ml syringe FotoSan Agent, Assorted: 2 x HIGH, MEDIUM, 1 x LOW
13900	Protection glasses
13901	Flip-on protection glasses
315118	Appli-Vac bendable tips 18ga, 18mm, pink (for agent HIGH)
315119	Appli-Vac bendable tips 19ga, 18mm, brown (for agent MEDIUM)
315120	Appli-Vac bendable tips 20ga, 18mm, yellow (for agent LOW)

Manufactured by:

CMS Dental ApS
Njalsgade 21 G
2300 Copenhagen S
Denmark

www.cmsdental.com
info@cmsdental.dk
Phone: +45 32 57 30 00
Fax: +45 32 57 10 23

