Oxford MTA

Oxford Scientific

Directions for Use

Endodontic Repair Cement

Oxford MTA is an endodontic repair cement in Capsules. Oxford MTA powder is consisting of very fine hydrophilic particles of several mineral oxides. After contact with Oxford MTA liquid it forms a gel that hardens to an impermeable barrier.

Oxford MTA is delivered in Capsules. Capsules are easily activated and the content of the capsule is easily ejected out with the Oxford Capsule APPLIER. Capsule mixing (mixing time 30 seconds) is achieved by a high frequency mixer with about 4,300 oscillations/min such as Capmix.

1. Indications
- Repair of root perforations during root canal therapy
- Root-end filling (retrograde)
- Pulp capping
- Root-end filling (orthograde)

2. Contraindications
Not known

3. Side effects
Not known

4. Activation and Mixing (see Instruction for Capsules)
Activate and mix the Capsule according to the information in the Capsule instruction.
Mixing time for the Capsules is 30 seconds.

Attention:
Avoid lag times between the processes of activation, mixing and application as the material is in the process of setting and lag times may impair or prevent application of the material. The material must be extruded within 10 seconds after the end of mix.
To prevent dehydration during setting, apply Oxford MTA intraoral immediately after mixing.

Working time of Oxford MTA is approx. 2:00 minutes (at 23°C).

5. Application
5.1. Repair of root perforations
Place rubber dam and clean the root canal system using intra-canal instruments and irrigate with NaOCl. Dry the root canal with paper points and isolate the perforation.
Fill the apical canal space up to the perforation completely with a suitable root canal filling material.
Mix Oxford MTA as described under point 4 and extrude it on a glass plate.
Apply Oxford MTA with suitable instruments into the perforation site and condense it.
Check the position of Oxford MTA in the root canal by an X-ray. If an adequate barrier has not been created, rinse Oxford MTA out of the canal and repeat the procedure.
Remove excess moisture with a damp cotton pellet or a paper point.
Place a damp cotton pellet in the access to the root canal and apply a temporary filling material.
Alternatively seal the access preparation with a suitable root canal filling material and seal the cavity with a tight filling.
Both options can be done not before 5 minutes after placement of the Oxford MTA.
Oxford MTA repair material remains as a permanent part of the root canal filling.

5.2. Root-End Filling (retrograde)
Create an access to the root-end and resect the root with a surgical bur.
Use an ultrasonic tip to prepare a class I root-end cavity preparation to a depth of 3-5 mm.
Isolate the area and dry the root end cavity with paper points. Achieve hemostasis with suitable methods.
Mix Oxford MTA as described under point 4 and extrude it on a glass plate.
Apply Oxford MTA with suitable instruments and condense it using a small plunger.
Remove excess cement and clean the surface of the root with a moist piece of gauze.
Confirm placement of the MTA-universal repair material with an X-ray. The Oxford MTA repair material remains as a permanent part of the root canal filling.

5.3. Pulp Capping
Place rubber dam and prepare the cavity outline. If caries is present, remove it. Rinse cavity and exposed pulpal areas with a suitable disinfectant.
Mix Oxford MTA as described under point 4 and extrude it on a glass plate.
With a suitable instrument apply a small amount of Oxford MTA over the exposed pulp and remove excess moisture with a dry cotton pellet.
Not before 5 minutes after application of Oxford MTA place a small amount of a flowable light cure liner and light cure.
Etch the remaining cavity walls according to the total-etch-technique with Oxford Etch and apply a suitable bonding agent (e.g. Oxford Bond TE) according to the corresponding instructions.
Place a light cure composite (e.g. Oxford Ceram NANO) according to the instructions and light cure.
Pulp vitality and status should be checked by X-ray at regular intervals.

5.4. Root End Filling (orthograde)
Place rubber dam and clean the root canal system using intra-canal instruments and irrigate with NaOCl. Dry the root canal with paper points.
For disinfection place calcium hydroxide paste in the root canal for one week. Seal the access opening with a temporary filling material.
Mix Oxford MTA as described under point 4 and extrude it on a glass plate.
With a suitable instrument apply a small amount of Oxford MTA into the apical region and condense it. Create a 3 – 5 mm barrier of Oxford MTA.
Check the position of Oxford MTA by an X-ray. If an adequate barrier has not been created, rinse Oxford MTA out of the canal and repeat the procedure.
Remove excess moisture with a damp cotton pellet or a paper point.
Place a damp cotton pellet in the access to the root canal and apply a temporary filling material.
Alternatively seal the remaining canal space with a suitable root canal filling material and seal the cavity with a tight filling.
Both options can be done not before 5 minutes after placement of the Oxford MTA.
Oxford MTA repair material remains as a permanent part of the root canal filling.

Additional remarks
- In the first hour after application handle the placed MTA cement carefully.
- Store Oxford MTA in the sealed packaging at a dry place prior to use.
- Intraoral application of Oxford MTA must be done immediately after mixing to prevent dehydration during setting.
- Oxford MTA can cause discoloration. Use Oxford MTA only in the root canal and/or the pulp chamber.
- In order to obtain a creamy consistency, 1 or 2 drops of sterile water can be added to the mixed Oxford MTA cement.

Storage
Store Oxford MTA at a dry pace at 10 – 25 °C (50 – 77 °F). **Do not store below 10°C (50 °F)!** Do not use after expiry date.
Capsules are for single use only.

Warranty
First Scientific Dental Materials GmbH warrants this product will be free from defects in material and manufacture. First Scientific Dental Materials makes no other warranties including any implied warranty of merchantability or fitness for a particular purpose. User is responsible for determining the suitability of the product for user's application. If this product is defective within the warranty period, your exclusively remedy and First Scientific Dental Materials' sole obligation shall be repair or replacement of the First Scientific Dental Materials product.

Limitation of Liability
Except where prohibited by law, First Scientific Dental Materials GmbH will not be liable for any loss or damage arising from this product, whether direct, indirect, special, incidental or consequential, regardless of the theory asserted, including warranty, contract, negligence or strict liability.

Keep away from children!
For dental use only!

Caution:
Federal law restricts the sale of this device to or by the order of a dentist.

Manufacturer:
First Scientific Dental Materials GmbH, 25335 Elmshorn, Germany

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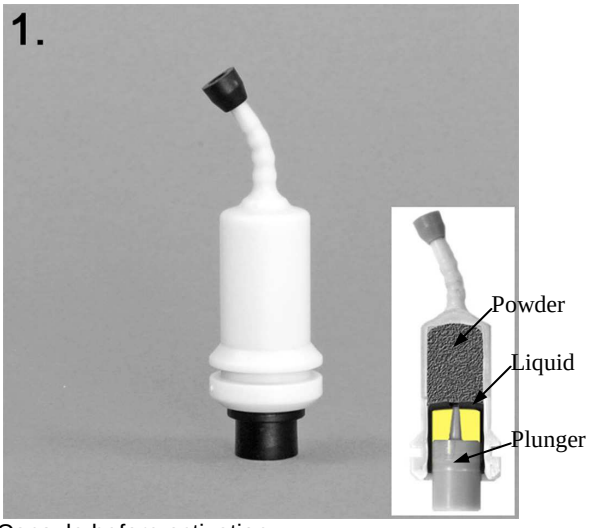
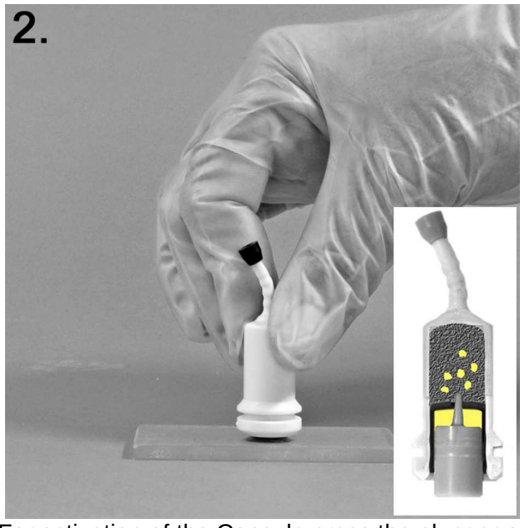
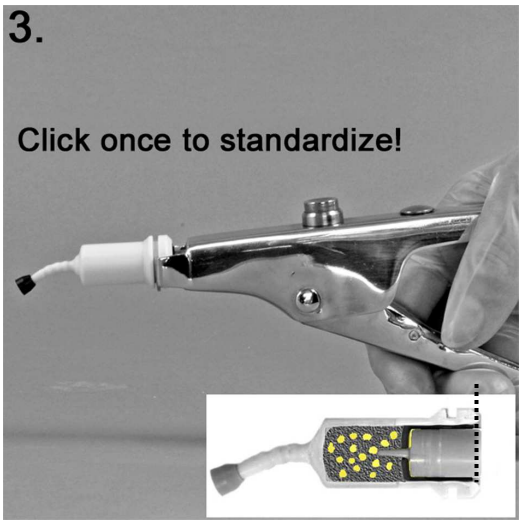
Instruction for activating and mixing Capsules



Capsule before activation.

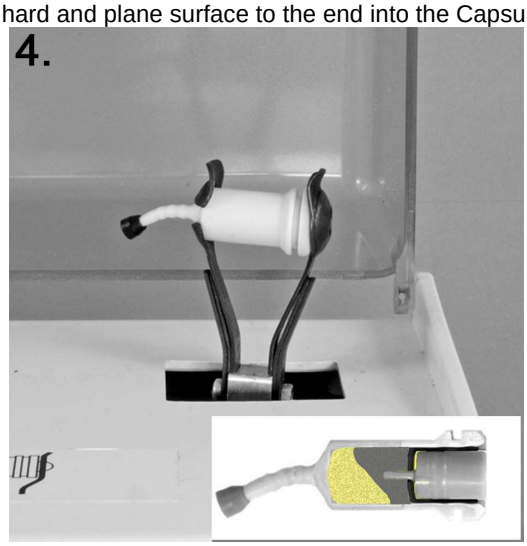


For activation of the Capsule press the plunger on a hard and plane surface to the end into the Capsule.

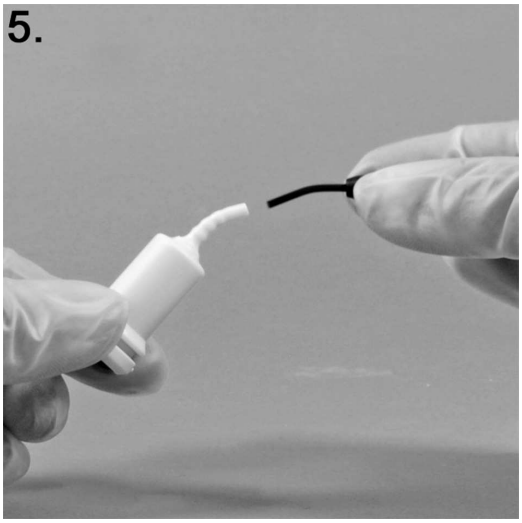


Insert the Capsule into the Capsule Applier and **click once** to standardize.

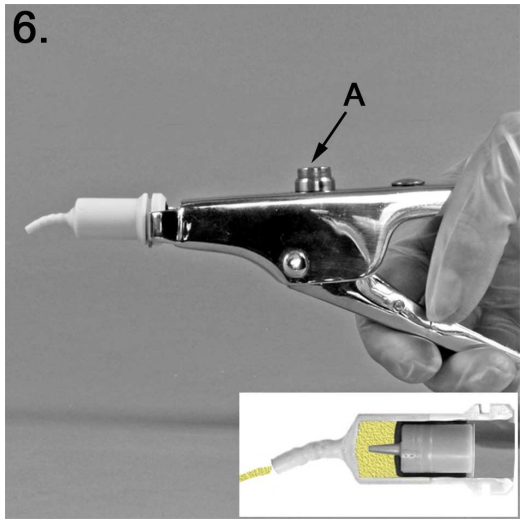
Note: The plunger and the bottom of the capsule must be at the same level.



Insert the Capsule into a mixer (or an amalgamator), close lid and mix immediately for
30 seconds (about 4300 oscillations / min).



Remove the pin from the nozzle. If not, capsule can burst.



Insert the Capsule into the Capsule Applier. Pull the lever 2 times (2 clicks) to prime the Capsule. Extrude the mixed material on a glass plate and apply directly. Unlock the gun (push button A) and remove the Capsule.

Only with the Capsule Applier the optimal amount of mixed material is guaranteed.

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