



HARVARD®

MTA Special

The perfect product for each endodontic application.



Discover the
Harvard MTA
specialties ...

Perfect
root end filling.

Bioactive
root canal filling.

Universal
product solutions



Made in Germany

EN

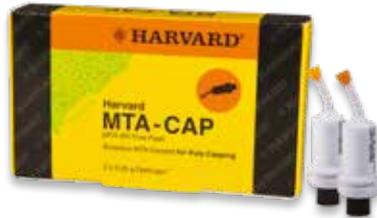
Harvard MTA-CAP

(MTA XR Flow Fast)

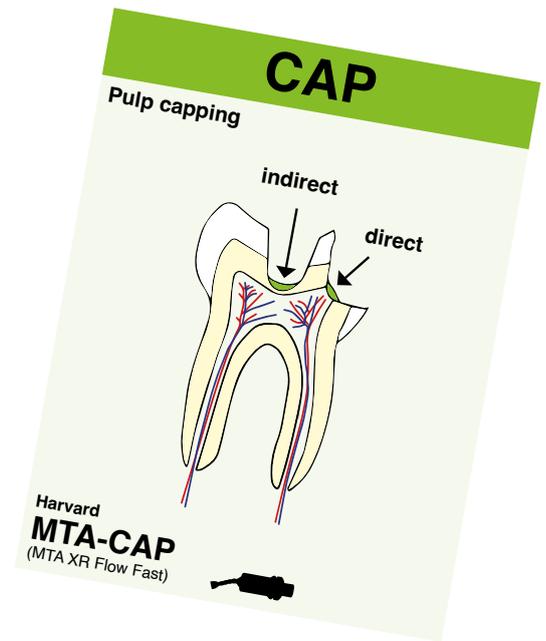
Flowable fast setting MTA cement in capsules

- Particularly suitable for pulp capping
- Calcium release and a high pH value (pH 12) promote the formation of hydroxyapatite and tertiary dentin
- Flowable consistency
- Extra fast setting
- Mixing time: 30 sec.
- Working time: 2:00 min. (from start of mixing at 23 °C (73 °F))
- Next treatment step: 3:00 min.

Set also in humid conditions



2 x 0.25 g



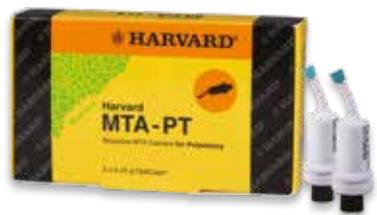
Harvard MTA-PT

NEW!

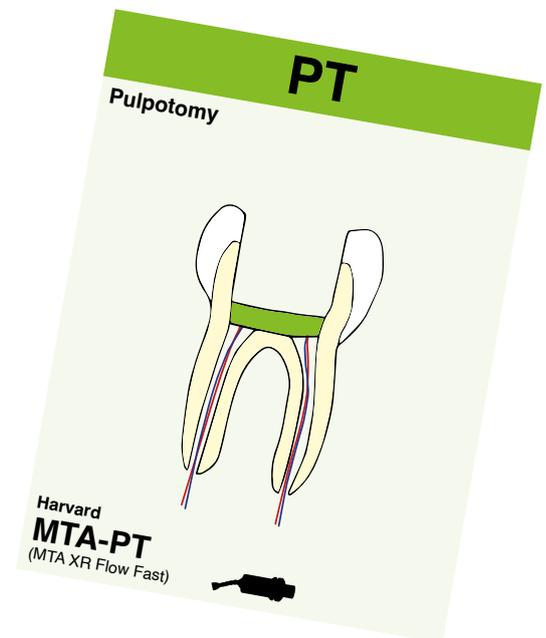
Fast cure, reinforced radiopaque MTA cement in capsules

- Particularly suitable for pulpotomy
- Calcium release and a high pH value (pH 12) promote the formation of hydroxyapatite as well as tertiary dentin
- Flowable consistency
- Particularly radiopaque
- Fast setting
- Mixing time: 30 sec.
- Processing time: 2:00 min. (from start of mixing at 23 °C (73 °F))
- Next treatment step: 3:00 min.

Set also in humid conditions



2 x 0.25 g

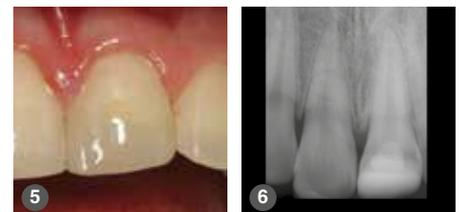
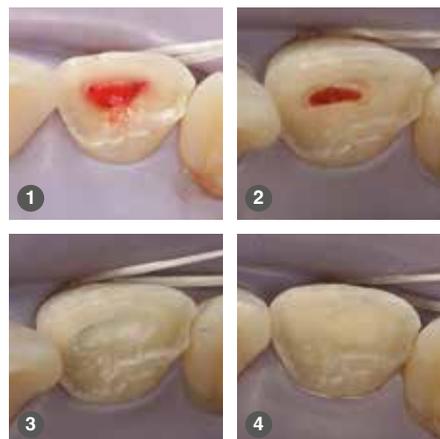


Clinical case with Harvard MTA-PT (MTA XR Flow Fast) Source: Thonemann/Federlin, University Regensburg

- 5.: 4 months after trauma: 21 vital
- 6.: 1 year after trauma: 21 vital

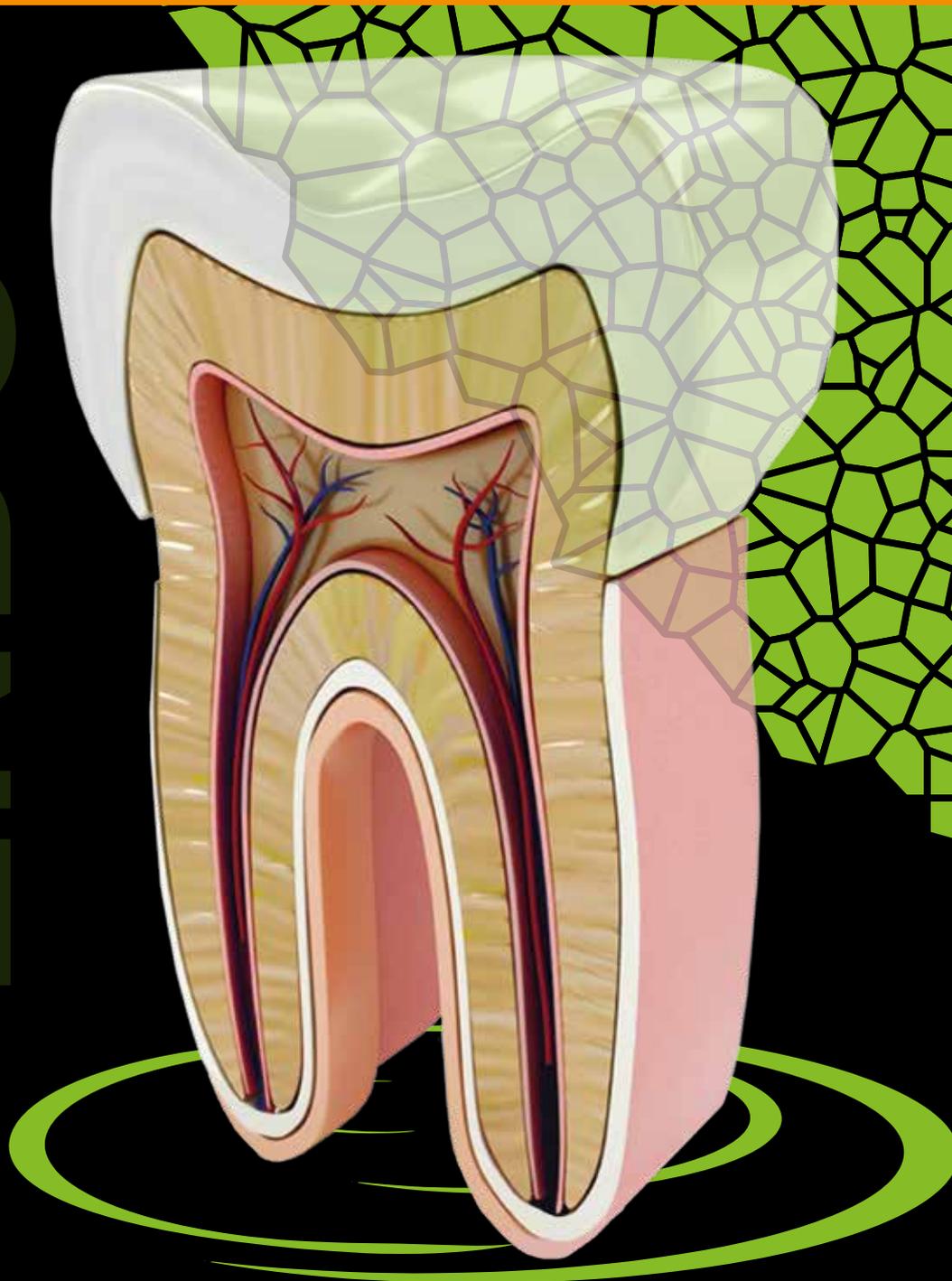
>> Product solutions that are increasingly adapted to the individual situation in terms of technology and material consistency make work in endodontics much easier. <<

- 1.: Initial situation: Anterior tooth trauma, complicated crown fracture 21
- 2.: Partial Pulpotomy
- 3.: Application of **Harvard MTA-PT**
- 4.: Covering with Glass ionomer cement



Prof. Dr. Marianne Federlin,
University Regensburg, Germany

ENDO



Harvard
MTA-CAP

Harvard
MTA-PT

Harvard
MTA-Repair

Harvard
MTA-Ortho

Harvard
MTA-Retro

Harvard
MTA-RootSeal

Discover ...

... all Harvard MTA specialties for the endodontic treatment.

Our reliable and easy-to-use materials will help you to provide a patient-oriented and successful treatment and thus ensure long-lasting success. Harvard offers the perfectly matched product for every indication.

- **CAP** – for direct and indirect pulp capping. Flowable fast setting MTA cement in capsules. (**Harvard MTA-CAP**)
- **PT** – bioactive materials with MTA fillers for the substitution of removed/partially removed pulp. (**Harvard MTA-PT**)
- **Repair** – an MTA cement in the capsule; designed for the closure of root perforations. (**Harvard MTA-Repair**)
- **Ortho** – for direct and simple closure of the apex with a particularly thin-bodied and long-setting MTA cement in the capsule. (**Harvard MTA-Ortho**)
- **Retro** – MTA cement for retrograde root canal filling. (**Harvard MTA-Retro**)
- **Root Seal** – for definitive root canal sealing in combination with a master point in the capsule. (**Harvard MTA-RootSeal**)

Harvard MTA-Repair

(MTA XR)

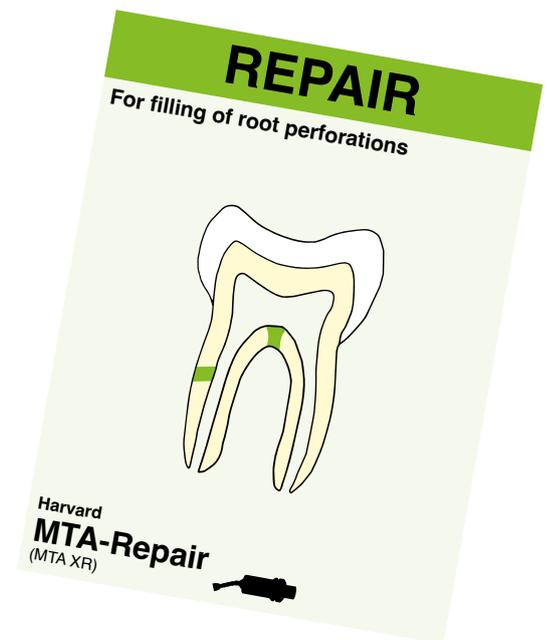
Extra radiopaque MTA cement in capsules

- Specially recommended for filling of root perforations
- Firm consistency
- Extra radiopaque
- Mixing time: 30 sec.
- Working time: 2:00 min. (from start of mixing at 23 °C (73 °F))
- Next clinical step: 5:00 min.

Set also in humid conditions



2 x 0.25 g



Harvard MTA-Ortho plus EndoDirect

(MTA XR Flow EWT)

Flowable MTA cement in capsules with extended working time

- Particularly suitable for direct and easy close of the apex
- Flowable consistency
- Extra long working time (4:00 min.)
- Mixing time: 30 sec.
- Working time: 4:00 min. (from start of mixing at 23 °C (73 °F))
- Next treatment step: after only 10:00 min.

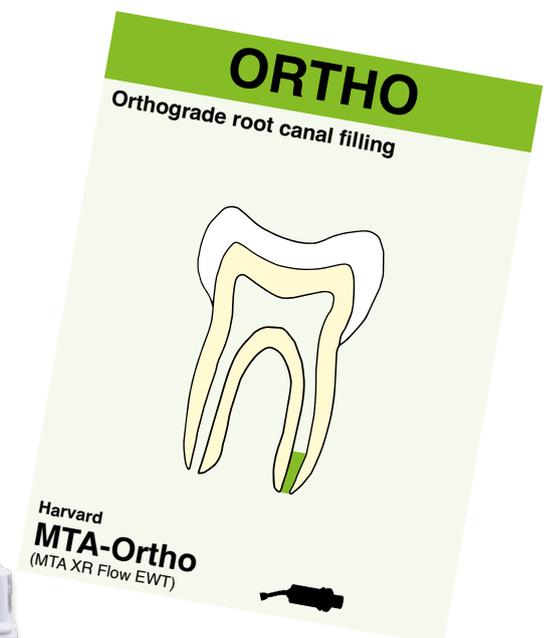
Set also in humid conditions

Easy to use:

1. Mix the MTA capsule
2. Fill the endo syringe with the material directly from the capsule
3. Thanks to the flexible endo tip and the endo-stop, controlled MTA application up to the apex of the root canal



2 x 0.25 g



Harvard MTA-Retro

(MTA XR Fast)

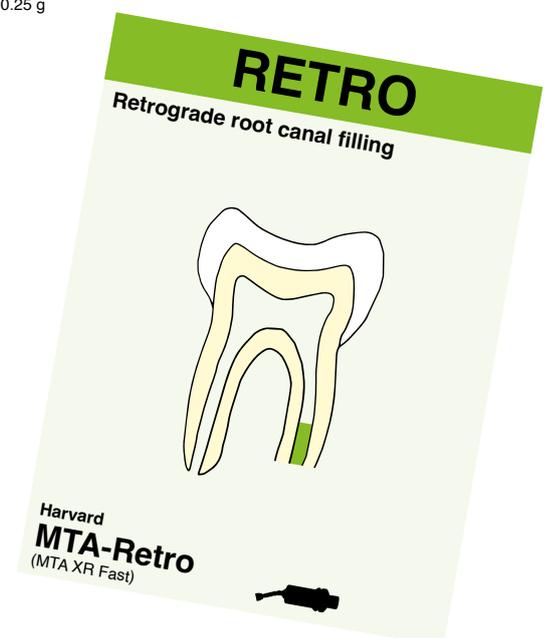
Fast setting, extra radiopaque MTA cement in capsules

- Specially recommended for root end filling (retrograde)
- Firm consistency
- Extra radiopaque
- Fast setting
- Mixing time: 30 sec.
- Working time: 2:00 min. (from start of mixing at 23 °C (73 °F))
- Next clinical step: 3:00 min.

Set also in humid conditions



2 x 0.25 g



Perfect root end filling ...

Harvard MTA-Retro Fast setting, extra radiopaque MTA cement in capsules



- Specially recommended for root end filling (retrograde)
- Firm consistency
- Extra radiopaque
- Fast setting
- Mixing time: 30 sec.
- Working time: 2:00 min. (from start of mixing at 23 °C (73 °F))
- Next clinical step: 3:00 min.
- Set also in humid conditions

>> Harvard MTA Retro. The perfect material for this treatment. <<

Infected tooth 25

„Pain swollen on the upper left second premolar 25. From the diagnostic X-ray, a radiolucency around the tip of the root, clinical examination reveals movement of the tooth and an old root canal with post and core plus crown.“



Dentist Dr. med. Klaus Herrligkoffer, Berlin, Germany

- 1.: First clinical image
- 2.: First X-ray before treatment
- 3.: Incision of the gingiva for flap surgery
- 4.: Retraction of the flap to expose the infected area
- 5.: Exposure of the inflamed area with infected bone tissue

- 6.: Removal of infected bone tissue, exposure of the root tip
- 7.: Resection of the root tip
- 8.: Dispensation of Harvard MTA-Retro (factory photo)
- 9.: Covered with a membrane after apical placement of Harvard MTA-Retro
- 10.: Closure of the flap with some stitches
- 11.: X-ray after placement of Harvard MTA-Retro

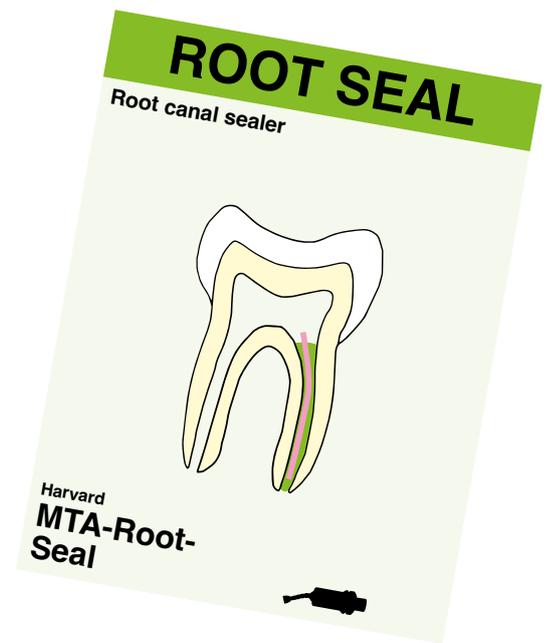


Harvard MTA-RootSeal NEW!

Bioactive MTA root canal sealer

- Excellent seal
- Apatite formation through reaction of released calcium and hydroxide with endogenous phosphate
- Mineralizing
- Bacteria-hostile environment (pH 12)
- Self cure
- Easily removable with Mastercone/Guttapercha
- Radiopaque
- OptiCaps® capsule for consistent consistency and convenient mixing
- Optional with EndoDirect syringe: direct application into the root canal
- Mixing time: 30 sec.
- Working time: > 10:00 min.
(from start of mixing at 23 °C (73 °F))
- Next clinical step: after 60:00 min.

Set also in humid conditions

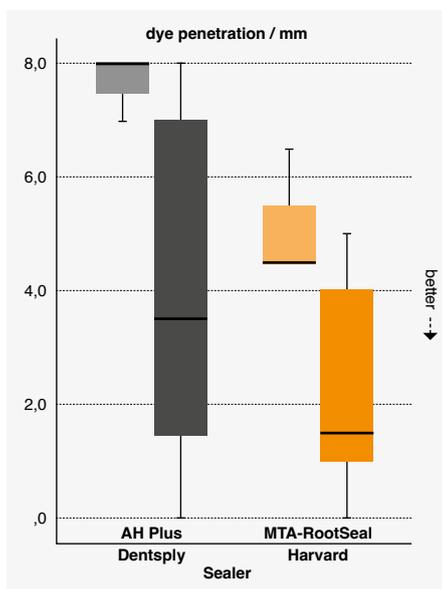


Investigation of microleakage of bioactive root canal sealers .

University Erlangen. Kopecka M, Opperskalski L, Zorzin J, Petschelt A, Lohbauer U, Ebert J

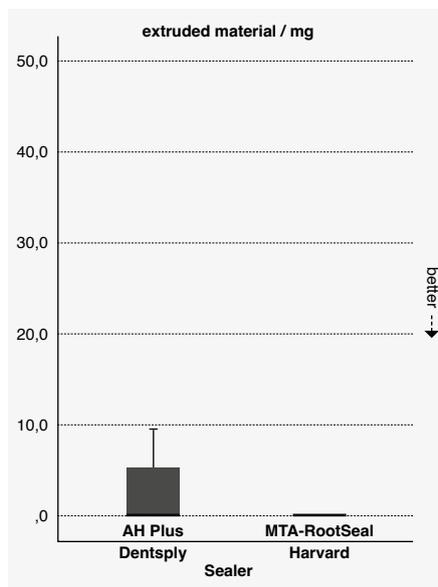
The aim of this study was to measure microleakage of this new sealer at two different time points (one week and 6 months) and to compare them with two well-established sealer materials. Additionally, the amount of material pressed beyond the apex (overfilling) was measured.

Excerpt from the study Erlangen, Germany 2022



Time: ■ 1 week, ■ 6 months

Dye penetration regarding different sealers and time points.



Amount of filling material pressed beyond the apex regarding different sealers.

Conclusion

The new materials under investigation showed less leakage and slightly less material overfilling than the well-established material AH Plus that was used for comparison. **Thus, regarding the parameters tested, the new material Harvard MTA-RootSeal can be recommended for clinical use.**



>> Harvard MTA – RootSeal for me the first choice. <<

Harvard MTA – RootSeal is a pure MTA, easy to use, hydrophilic, has a very good consistency and offers a very good adaptation and sealing of the root canal wall. Further advantages are: a high pH value (antibacterial effect) biocompatibility, fast setting time, no postoperative pain and easy revisability.



Amir Ibrak D.D.S., N.D.B., E.R.B., MSc
Scientific Affairs

Harvard MTA Universal OptiCaps®

Endodontic repair cement in capsules based on MTA

- Highly biocompatible material
- Excellent bond to dentin
- Radiopaque
- Firm and homogenous consistency directly from the capsule
- Forms tertiary dentin
- Setting not affected by humidity
- Suitable for pulp capping, sealing root perforations, root end fillings (orthograde or retrograde)
- Mixing time: 30 sec.
- Working time: 2:00 min. (from start of mixing at 23 °C (73 °F))
- Next clinical step: 5:00 min.

Set also in humid conditions



Harvard MTA Universal HandMix

Endodontic repair cement based on MTA, as HandMix

- Biocompatible material
- Excellent bond to dentin
- Radiopaque
- Forms tertiary dentin
- Setting not affected by humidity
- Suitable for pulp capping, sealing root perforations, root end fillings (orthograde or retrograde)
- Very easy to mix

Set also in humid conditions



Due to MTA, good long term prognosis.

**>> Harvard
MTA Universal
OptiCaps®. This
product should not
be missing in any
practice. <<**

Mineral Trioxide Aggregate (MTA) should not be missing in any practice, it is the ideal product for the direct pulp capping. Compared to calcium hydroxide preparations, MTA does not form a necrosis zone, but stimulates the dentin to form a covering layer over the cement. The pulp remains vital and the patient remains symptom-free. Due to its biocompatibility, there is no inflammatory reaction of the bone if a perforation site in the apical region or a filled apex is lightly plugged with MTA cement. A slight expansion of the cement leads to a

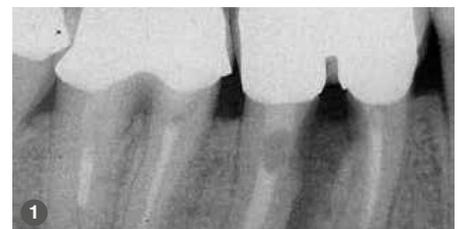
secure sealing of the indication site.

Simple and precise application with optimum consistency is provided by the Harvard MTA Universal OptiCaps®. **Valuable treatment time is saved, and I am very satisfied with the good treatment results.**



Oxana Hilfer, Dentist Hamburg, Germany

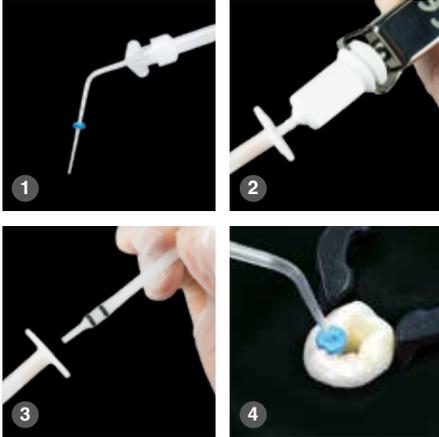
- 1.: **Initial situation:** Damaged root canal wall and demineralized bone.
- 2.: **After treatment:** Root canal perforation sealed with Harvard MTA Universal.
- 3.: **After one year:** Perfect seal of the application areas. New remineralized bone and better retention of the tooth.



Optional:

The **EndoDirect** Syringe for perfect **application.**

- 1.: Angled needle tip with individual working length
- 2.: Filling the EndoDirect syringe
- 3.: Insertion of the plunger into the EndoDirect syringe
- 4.: Application of the material into the root canal



„Click before you mix!“

Instruction for the activating and mixing from Harvard OptiCaps®

Remove capsule (OptiCaps®) from the pouch

- 1.: OptiCaps® before activation.
- 2.: For activation of the OptiCaps® press the plunger on a hard and plain surface to the end into the OptiCaps®.
- 3.: Insert the OptiCaps® into the Harvard Applier OptiCaps® and click once to standardize.

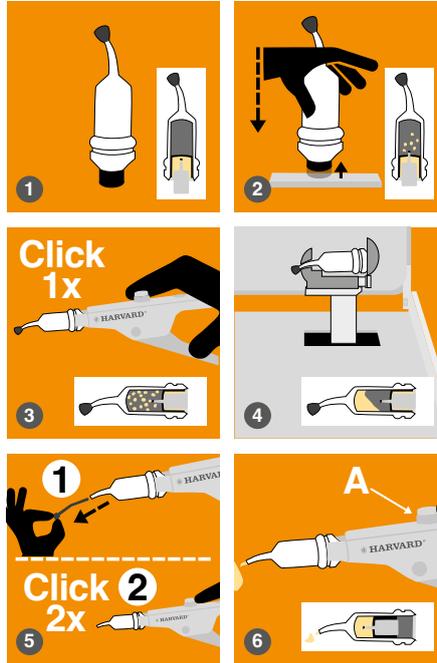
Note: The plunger must be at the same level as the bottom of the capsule.

- 4.: Insert the OptiCaps® into a mixer, close lid and mix immediately for the period mentioned in the instructions for use (with about 4300 oscillations / min).
- 5.: Insert the OptiCaps® into the Harvard Applier OptiCaps®. Remove the pin from the nozzle. If not, capsule can burst.

Pull the lever twice (2 clicks) to prime the OptiCaps®.

- 6.: Extrude the mixed material on a glass plate or apply directly. Unlock the gun (push button A) and remove the OptiCaps®.

Only with the Harvard Applier OptiCaps® (Order-No. 7092000) the optimal amount of mixed material is guaranteed.



For the selection of a suitable capsule mixer, our sales and marketing colleagues are gladly available to you.

Mixing & working times of various Harvard OptiCaps® products.

Mixing time	Working time*	Next clinical step
Harvard MTA-CAP (MTA XR Flow Fast)		
30 Sek.	2:00 Min.	3:00 Min.
Harvard MTA-PT		
30 Sek.	2:00 Min.	3:00 Min.
Harvard MTA-Repair (MTA XR)		
30 Sek.	2:00 Min.	5:00 Min.
Harvard MTA-Ortho (MTA XR Flow EWT)		
30 Sek.	4:00 Min.	10:00 Min.
Harvard MTA-Retro (MTA XR Fast)		
30 Sek.	2:00 Min.	3:00 Min.
Harvard MTA-RootSeal		
30 Sek.	>10:00 Min.	60:00 Min.
Harvard MTA Universal OptiCaps®		
30 Sek.	2:00 Min.	5:00 Min.

* from the start of mixing at 23 °C (73 °F)

Order information:

Harvard MTA-CAP	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081503

Harvard MTA-PT	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081512

Harvard MTA-Repair	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081505

Harvard MTA-Ortho plus EndoDirect	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch, 2 MTA EndoDirect syringes with flexible endo-tip	7081510

Harvard MTA-Retro	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081506

Harvard MTA-RootSeal	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch, 2 MTA EndoDirect syringes with flexible endo-tip	7081511
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081513

Harvard MTA Universal OptiCaps®	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081502

Harvard Applier OptiCaps®	7092000
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Harvard MTA Universal HandMix	
1 g powder, 3 ml liquid, dosage spoon, mixing pad, spatula	7081507
2 g powder, 4 ml liquid, dosage spoon, mixing pad, spatula	7081508

Harvard Distribution Partner.

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HARVARD®

Marke und Qualität seit 1892

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