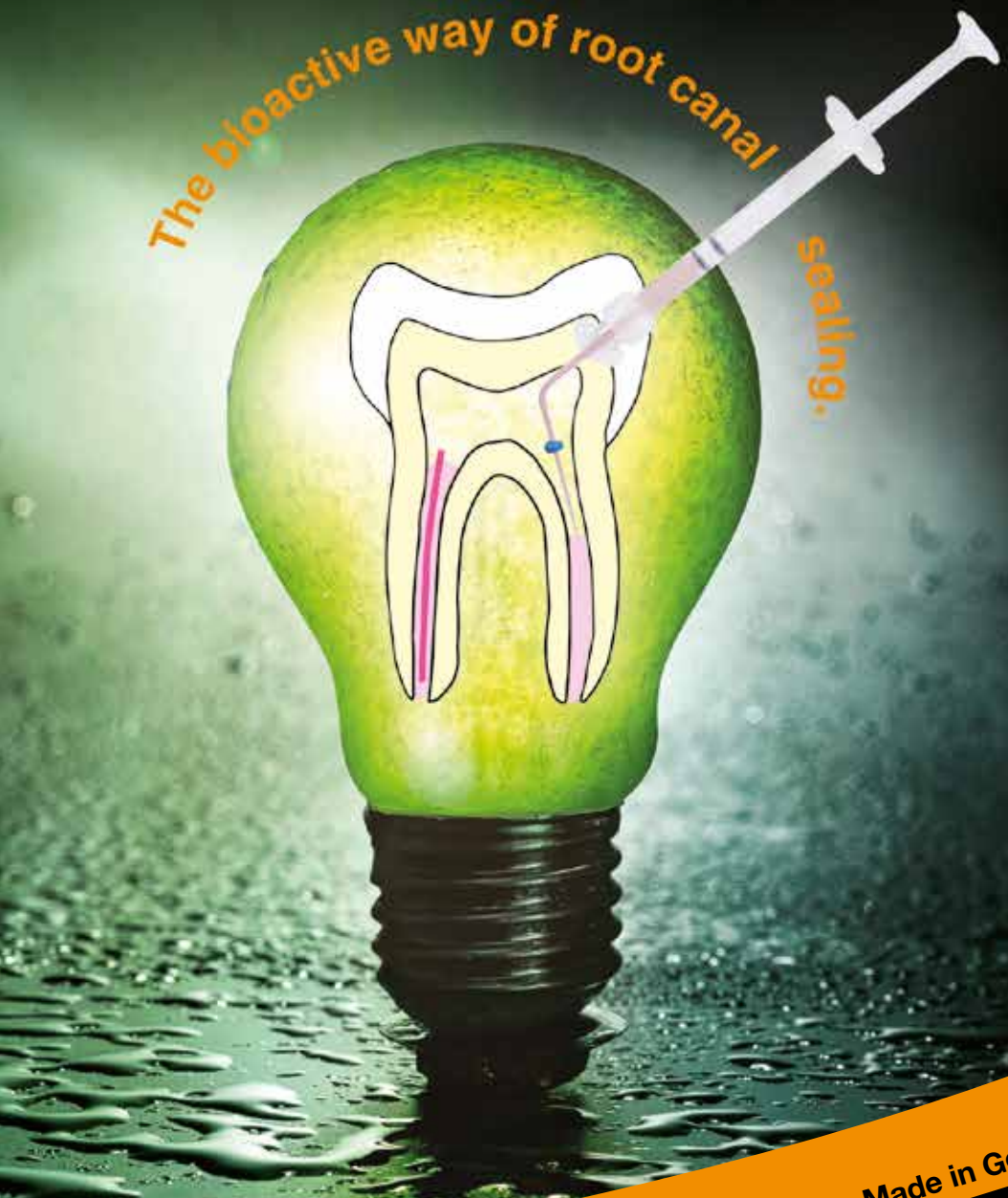
HARVARD®

The Bioactive Root Canal Sealers.

NEW!



Harvard
BioCal®- RootSeal

Bioactive, resin-modified
MTA root canal sealer

Harvard
MTA- RootSeal

Bioactive MTA
root canal sealer in capsules

Made in Germany

EN

You want a fast & perfect root canal sealing?

Harvard
BioCal®-RootSeal

NEW!

Bioactive, resin-modified MTA root canal sealer

- Excellent seal
- Apatite formation through reaction of released calcium and hydroxide with endogenous phosphate
- Mineralizing
- Environment hostile to bacteria (pH 11)
- Self cure and additional light cure for faster setting of the surface
- Easy to remove and revise, e.g. for subsequent post placement with fiber posts
- Convenient application from the minimix syringe
- Radiopaque
- **Optional:** for optimal, bubble-free, direct application into the root canal also available with **EndoDirect syringes** (Harvard BioCal®-RootSeal plus EndoDirect)

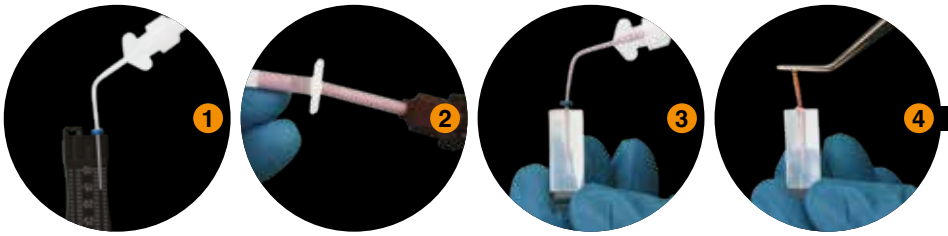
For perfect direct bubble-free insertion

10 x EndoDirect

4 g (2.5 ml)

For the classic insertion with a lentulo

4 g (2.5 ml)

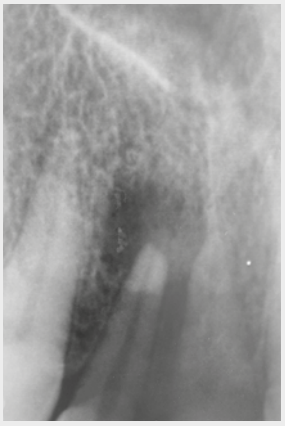


Application with the EndoDirect syringe:

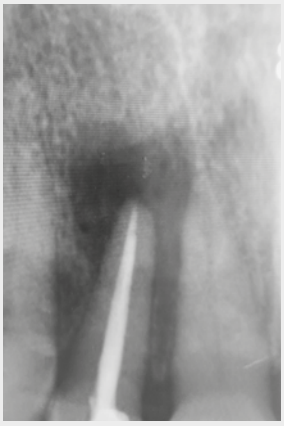
1: Set of the working length with the endo stop
2: Transfer the required amount of Harvard BioCal®-RootSeal into the EndoDirect syringe
3: Injection of Harvard BioCal®-RootSeal into the root canal
4.: Insertion of gutta-percha up to the working length into the root canal

The experts' assessment

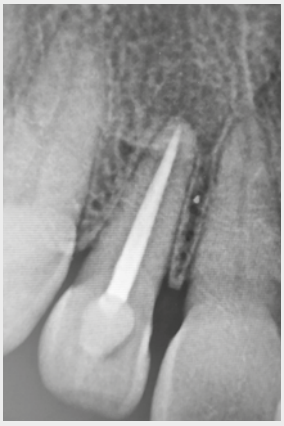
>> The bioactive success! <<



Apical radiolucency 12



Definitive root canal filling with **Harvard BioCal®-Root Seal** and gutta-percha



Recall after 6 months: Successful bone regeneration in apical region

Dentist Dr. Hassan Salma
Mediclinic Al Noor Hospital,
Abu Dhabi

The experts' assessment

Bioactive root canal sealer – and it's sealed!

The root canal filling serves to seal without gaps in order to prevent bacteria from reinfecting the root canal. The properties of **Harvard BioCal®-RootSeal** such as: biocompatibility, bioactivity and antimicrobiality but also the excellent physicochemical properties guarantee a perfect bond between the dentin and the root canal filling material, even in combination with a masterpoint.

Harvard BioCal®-RootSeal is also characterized by its ease of use: **It is ready to use and does not need to be mixed.**

- **Excellent seal**
- **Apatite formation** through reaction of released calcium and hydroxide with endogenous phosphate
- **Mineralizing**
- **Environment hostile to bacteria** (pH 11)
- Self cure and additional light cure for faster setting of the surface
- Easy to remove and revise, e.g. for subsequent post placement with fiber posts
- Convenient application from the minimix syringe
- **Radiopaque**
- **Durable solution** for endodontic therapy
- **Time saving:** after application with the Masterpoint and superficial light cure, the treatment can be continued

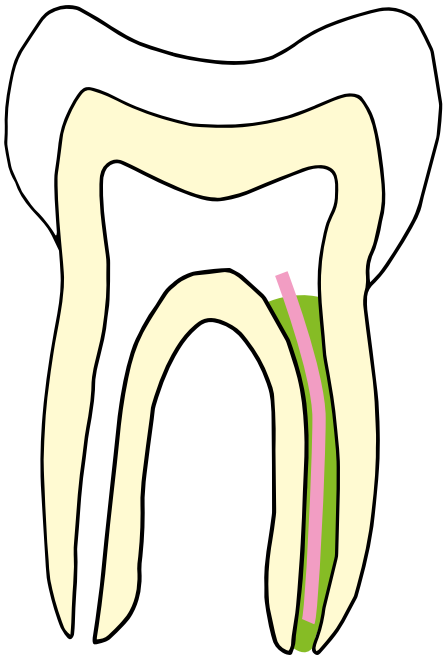
Two package variants available:
1. Harvard BioCal®-RootSeal **plus EndoDirect** – for direct, bubble-free application into the root canal
2. Harvard BioCal®-RootSeal – for classical application with the Lentulo

The optimized consistency guarantees a secure, gap-free interface between dentin and **Harvard BioCal®-RootSeal**. It can be easily removed in case of revision. The high pH value (11) creates an environment that is antibacterial, which is particularly important in the area of the smallest lateral canals. Bioactive properties also induce mineralization by reaction of released calcium and hydroxide with endogenous phosphate. This stabilizes the root canal filling of the affected tooth.

Advantages:
- **Long working time: 10:00 min**
- Easy application with the Minimix syringe
- Fast and convenient to use
- Equally suitable for endo beginners and endo specialists

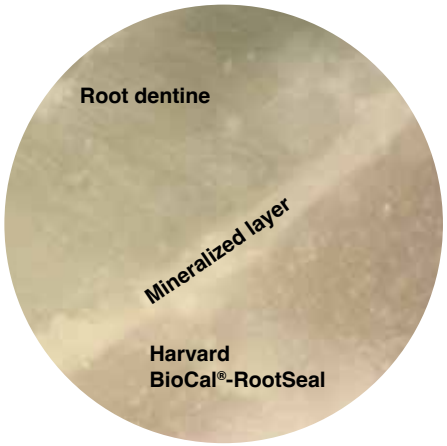
- Bubble-free insertion with the EndoDirect syringe
- Radiopaque

Indication:
- Permanent root canal filling for teeth of the second dentition in combination with gutta-percha posts



Facts in the magnification.

Mineralized layer between dentin and **Harvard BioCal®-RootSeal**: **gap-free** and mineralized

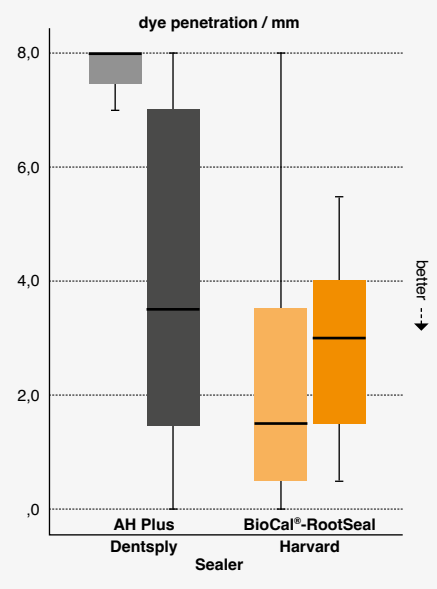


Laser microscope image (magnification: 50x / 0.95)
Final root canal filling
Cross-section of root canal after two months of storage in artificial saliva
(37 °C / 98,6 °F)

Investigation of microleakage of bioactive root canal sealers.

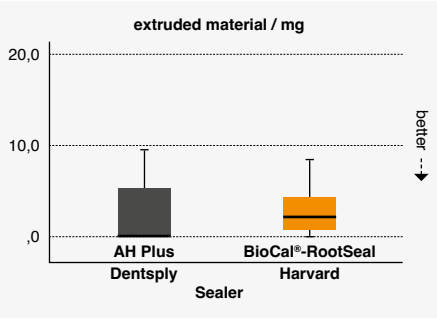
University Erlangen, Germany.
Kopecka M, Opperskalski L, Zorzin J, Petschelt A, Lohbauer U, Ebert J

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.



Time: 1 week, 6 month

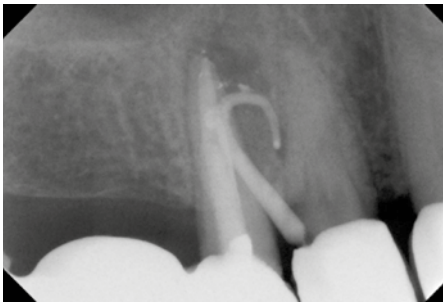
Dye penetration regarding different sealers and time points.



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

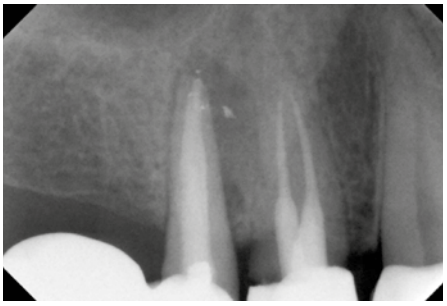
Conclusion
The new materials under investigation showed less leakage and slightly less material overfilling than the well-established material AH Plus that were used for comparison. **Thus, regarding the parameters tested, both new material Harvard BioCal®-RootSeal can be recommended for clinical use.**

Chronic periapical abscess tooth 14



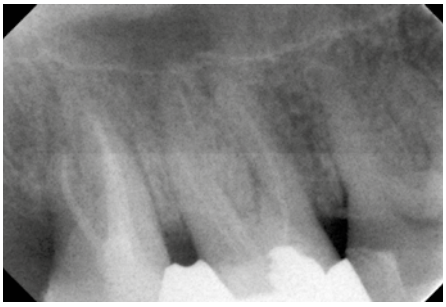
Before: The patient came in with an abscess with fistula formation in the upper right premolar region (tooth 14)

X-ray with inserted gutta-percha point in the fistula tract



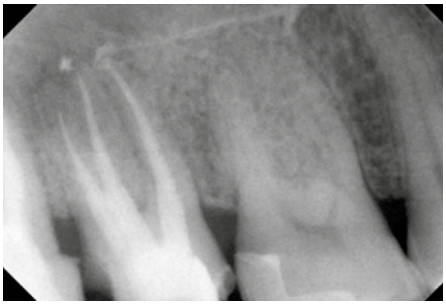
After: X-ray of the final obturation with Thermafil® and Harvard BioCal®-RootSeal

Acute periapical periodontitis tooth 17



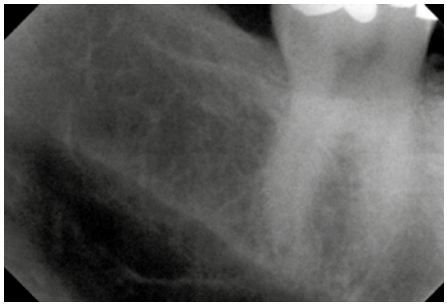
Before: The patient came with pain in the right maxilla in the area of the molars (tooth 17)

X-ray shows root canals at 17 and 18



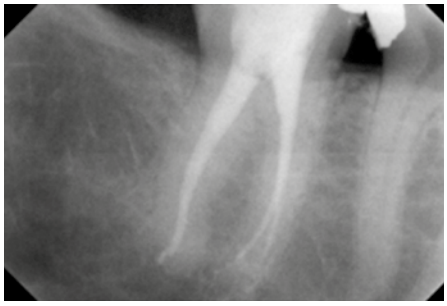
After: X-ray of the final obturation with Thermafil® and Harvard BioCal®-RootSeal

Deep filling near the pulp, tooth 47



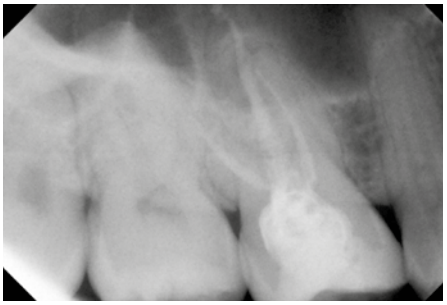
Before: The patient came in with severe and constant pain in the right lower molar (tooth 47 / diagnostic pulpitis)

X-ray:
Tooth 47 – deep filling near the pulp



After: X-ray of the final obturation with Thermafil® and Harvard BioCal®-RootSeal

Acute periapical periodontitis tooth 16



Before: The patient came in with a dull bite pain on the upper right molar (tooth 16)

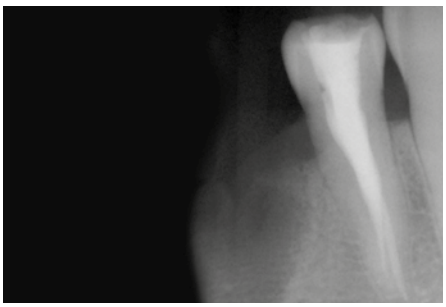
X-ray image before treatment.

After: X-ray of the final obturation with Thermafil® and Harvard BioCal®-RootSeal

Acute periapical periodontitis tooth 44

Before: This patient was referred from another clinic. He came to our clinic (Infinity Dental Clinic, Dubai) complaining of pain in the lower right premolar region
(Tooth 44)

First X-ray



After: X-ray of the final obturation with Thermafil® and Harvard BioCal®-RootSeal

>> Best results with Harvard BioCal®-RootSeal. <<

I recommend **Harvard BioCal®-RootSeal** to every dental professional because it is easy to use, safe and cost-effective, no matter what technique is used.

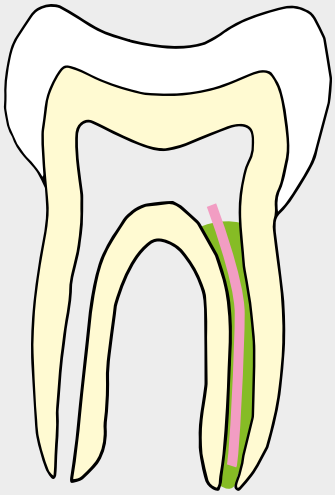
Since we started working with **Harvard BioCal®-RootSeal**, we no longer have to fear possible negative consequences of exceeding the material through the apex (foramen apicale).“

Dentist Dr. Nihad Hababat, Dubai

Harvard
MTA-RootSeal

NEW!

Bioactive MTA root canal sealer in capsules



- 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

2 x 0.25 g

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

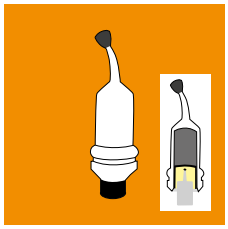
Angled needle tip with individual working length

Filling the EndoDirect syringe

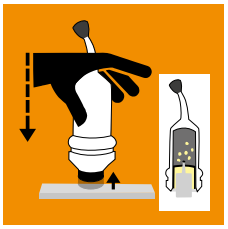
Insertion of the plunger into the EndoDirect syringe

Application of the material into the root canal

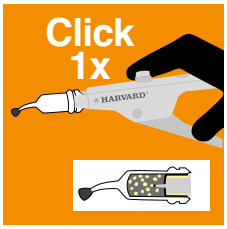
Click before you **mix.** Instructions for activating and mixing Harvard OptiCaps®.



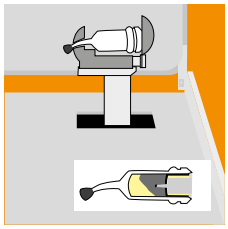
OptiCaps® before activation



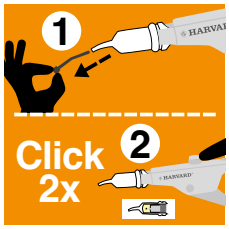
Activation: press the plunger on a hard and plain surface to the end into the OptiCaps®



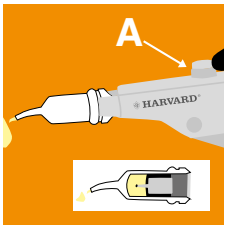
Insert the OptiCaps® into the Harvard Applier OptiCaps® and click once to standardize



Mix capsule 30 sec



Insert the OptiCaps® into the Harvard Applier OptiCaps®, remove the pin from the nozzle



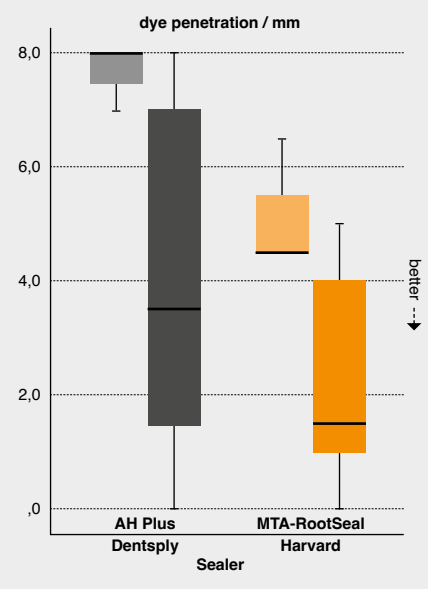
Extrude the mixed material on a glass plate or apply directly, unlock the gun and remove the capsule

The experts' assessment

Investigation of microleakage of bioactive root canal sealers.

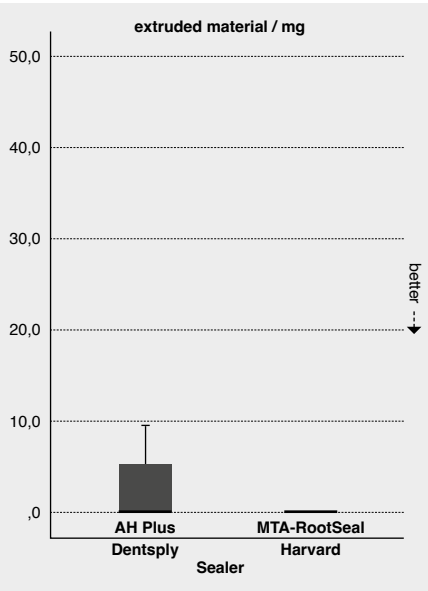
University Erlangen, Germany.
Kopecka M, Opperskalski L, Zorzin J, Petschelt A, Lohbauer U, Ebert J

PD Dr. Johannes Ebert,
University Erlangen, Germany



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 is the first choice for me. <<

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 Ibrik D.D.S, N.D.B, E.R.B, MSc
Scientific Affairs

HARVARD RECOMMENDATION

Harvard
Glide & Clean

Harvard Glide & Clean is a carbamide peroxide and EDTA containing gel in syringes for the effective and facilitated cleaning of the root canal

EDTA supports the preparation by dissolving calcium salts from the canal. Developed for use in combination with sodium hypochlorite rinses.

- Facilitated removal of pulp tissue, dentine chips and debris
- Removal of the smear layer
- Chemical preparation
- Lubricant for rotary instruments for root canal preparation, reduction of the risk of fracture

2 ml

Order informations:

Harvard BioCal®-RootSeal

Harvard BioCal®-RootSeal plus EndoDirect	
4 g (2.5 ml) minimix syringe 10 EndoDirect syringes with flexible endo-tip 10 mixing tips (S-Brown)	7081552
Harvard BioCal®-RootSeal	
4 g (2.5 ml) minimix syringe 10 mixing tips (5 x S-Brown, 5 x O-Brown) 5 intra tips long, mixing pad	7081553

Harvard Mini 4:1 / 10:1 S-Brown	7093050
Refill bag with 50 mixing tips	
Harvard Mini 4:1 / 10:1 O-Brown	7091100
Refill bag with 50 mixing tips	
Harvard IntraTips long	7083620
Refill bag with 50 intra tips	

Harvard MTA-RootSeal

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 Glide & Clean

Harvard Glide & Clean	
2 ml syringe, 6 flexible tips	7081560

Harvard Distribution Partner.

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HARVARD®
Marke und Qualität seit 1892

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