



# Harvard MTA Universal

## Endodontic bioactive repair cement based on diverse mineral oxides

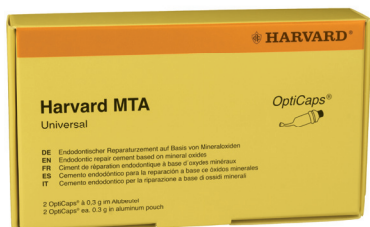
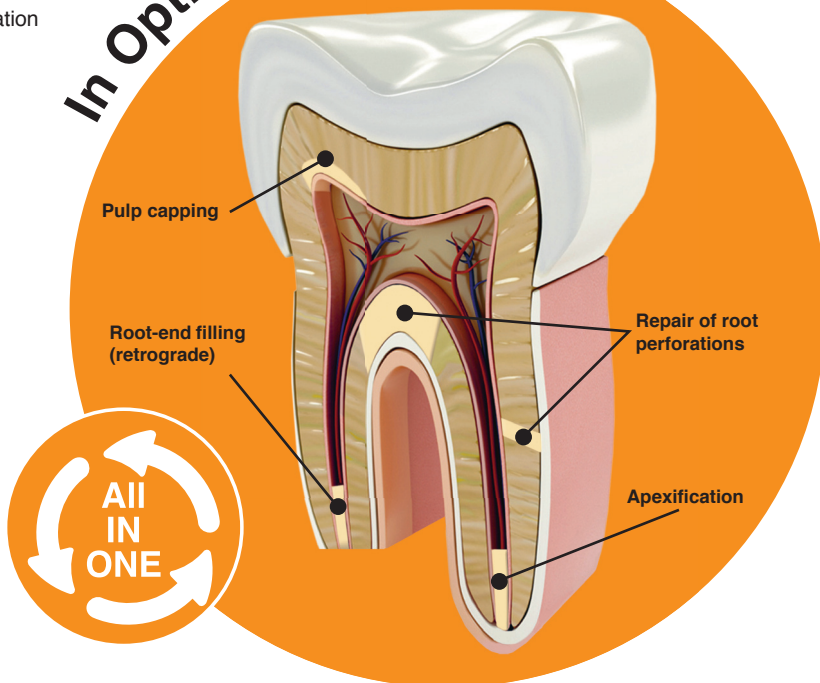
### (Mineral-Trioxide-Aggregat)



### Properties

- **Highly biocompatible material**
  - Formation of tertiary dentin over the pulp ("dentin bridge")
  - Formation of a protective layer preventing bacterial penetration with the formation of calcium hydroxid and apatite
  - Excellent bond to dentin
  - Dimensional stability (no shrinkage)
  - Excellent seal
- 
- **Comfortable application** with guttapercha and other root canal sealers
  - Setting not affected by humidity
  - Bacteriostatic with its high pH-value
  - Radiopaque, easy readable at radiographs
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- **Next clinical step possible after 5 min**

## In OptiCaps® or as HandMix



### Indications

- **Repair of root perforations**
- **Root-end filling (retrograde)**
- **Apexification / orthograde root-end filling**
- **Direct and indirect pulp capping**
- **Repair of internal resorption**
- **Pulpotomy**



## Advantages of powder / liquid

- Flexible and economical.
- Adapt the consistency based on the procedure.
- Can easily be mixed to a nice creamy consistency.

## Advantages of OptiCaps®

- Easy handling and reproducible.
- Nice creamy consistency: fast and consistent

### Technical Data

#### Mixing ratio

Powder : liquid (by weight)                      2 : 1    2.6 : 1    3 : 1

#### Working time

(23 °C / 73 °F)                                      3 min    2 min    1 min

#### Next clinical step after

5 min    5 min    5 min

### Technical Data

#### Mixing time

(23 °C / 73 °F)                                      30 sec

#### Working time

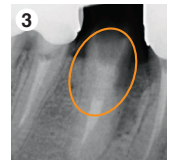
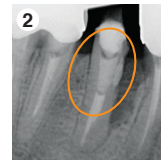
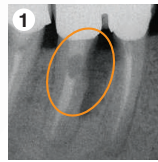
(23 °C / 73 °F)                                      2 min

#### Next clinical step after

5 min

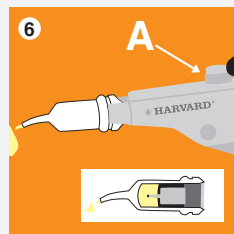
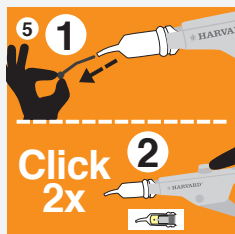
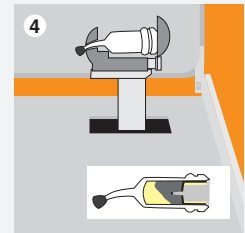
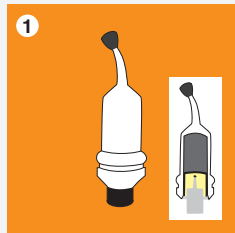


Due to MTA, good long term prognosis.



- 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

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



1. OptiCaps® before activation.
2. Activation: press the plunger to the end into the capsule.
3. Insert the OptiCaps® into the applicator and click once to standardize.
4. Mix the OptiCaps®.
5. Insert the OptiCaps® into the applicator. Remove the pin. Pull the lever twice (2 clicks) to prime the OptiCaps®.
6. Unlock the gun (push button A) and remove the OptiCaps®.

\* Internal data – and graphic of Harvard Dental International

### Article Information

**Harvard MTA Universal OptiCaps®**  
2 OptiCaps® ea. 0.3 g,  
ea. packed in an aluminium pouch

### Bestell-Nr.

7081502

### Article Information

**Harvard MTA Universal HandMix**  
1 g powder, 3 ml liquid,  
dosing spoon, mixing pad, spatula

### Bestell-Nr.

7081507



# HARVARD®

Marke und Qualität seit 1892

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