

## Harvard MTA Universal

# Endodontic bioactive repair cement based on diverse mineral oxides

JAHRE 1892-2017
HARVARD

(Mineral-Trioxide-Aggregat)

#### **Properties**

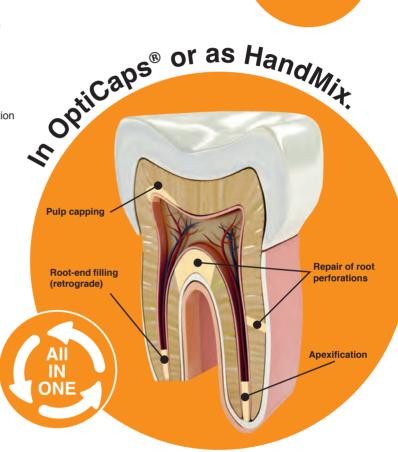
- Highly biocompatible material
- Formation of tertiary dentin over the pulp ("dentin bridge")
- Formation of a protective layer preventing bacterial penetration with the formation of calcium hydroxid and apatite
- Excellent bond to dentin
- Dimensional stability (no shrinkage)
- Excellent seal
- Comfortable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





#### Indications

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









#### Avdantages of powder / liquid

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

#### Avdantages 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

**Technical Data** Mixing time

(23 °C / 73 °F)

30 sec

Working time (23 °C / 73 °F)

3 min 2 min 1 min

Working time (23 °C / 73 °F)

2 min

Next clinical step after

5 min 5 min 5 min

Next clinical step after

5 min

#### Due to MTA, good long term prognosis.

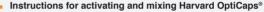






- 1. Initial situation: Damaged root canal wall and demineralized bone.
- 2. After treatment: Root canal perforation sealed with Harvard MTA Universal.
- 3. After one year: Perfect seal of the application areas New remineralized bone and better retention of the tooth.

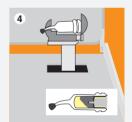
### Click before you mix. Instructions for activating and mixing Harvard OptiCaps®



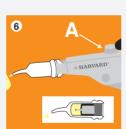












- 1. OptiCaps® before activation.
- 2. Activation: press the plunger to the end into the capsule.
- 3. Insert the OptiCaps® into the applier and click once to standardize.
- 4. Mix the OptiCaps®.
- 5. Insert the OptiCaps® into the applier. Remove the pin. Pull the lever twice (2 clicks) to prime the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

Article Information	Order no
Harvard MTA Universal OptiCaps®	7081502
2 OptiCaps® ea. 0.3 g,	
ea, packed in an aluminium pouch	

**Article Information** Order no. Harvard MTA Universal HandMix 7081507 1 g powder, 3 ml liquid, dosing spoon, mixing pad, spatula



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