

ProRoot® MTA (MINERAL TRIOXIDE AGGREGATE) ROOT CANAL REPAIR MATERIAL

DENTSPLY Tulsa Dental Specialties

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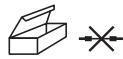
Store in a cool
dry place.



Shelf Life



See Directions For Use



Nonreturnable If Opened

Rx only
 For Dental Use Only

CAUTION:

ProRoot MTA root repair material is a powder consisting of fine, hydrophilic particles that set in the presence of water. Hydration of the powder creates a colloidal gel that solidifies to form a strong impermeable barrier that fully cures over a four-week period.

INDICATIONS:

ProRoot MTA root repair material is indicated for use as:

- A root-end filling material
- For the repair of root canals as an apical plug during apexification
- For repair of root perforations during root canal therapy
- As a consequence of internal resorption
- As a pulp capping material

CONTRAINDICATIONS:

None known.

PRECAUTIONS:

- ProRoot MTA root repair material pouches must be kept tightly closed to avoid degradation by moisture.
- ProRoot MTA root repair material must be stored in a dry area to avoid degradation by moisture.
- ProRoot MTA root repair material must be kept in its sealed packaging prior to use to avoid degradation by moisture.
- ProRoot MTA root repair material must be placed intra-orally immediately after mixing with liquid, to prevent dehydration during setting.
- Excess water will retard curing process. Excess moisture in cotton pellets should be held to a minimum.
- Do not irrigate after placing ProRoot MTA root repair material, remove excess water with moist cotton pellet.

DIRECTIONS FOR USE:
REPAIR OF PERFORATIONS SECONDARY TO INTERNAL RESORPTION:

1. Using a rubber dam, debride the root canal system using intracanal instruments and irrigate with NaOCl. For disinfection place calcium hydroxide paste in the root canal system for one week.
2. Place a temporary restoration to seal the access opening.
3. After one week, using a rubber dam, remove the CaOH from the canal system using NaOCl irrigation and instrument as needed.
4. Dry the canals with paper points and identify the resorptive defect site.
5. Obturate all the canal space apical to the defect.
6. **PREPARE THE PROROOT MTA ROOT REPAIR MATERIAL ACCORDING TO THE MIXING INSTRUCTIONS PROVIDED.**

7. Using the carrier, dispense the material into the resorptive defect site. Condense the ProRoot MTA root repair material into the cavity using a small amalgam plugger, cotton pellets or paper points.
8. Confirm the placement of ProRoot MTA root repair material with a radiograph. If an adequate barrier has not been created, rinse the ProRoot MTA root repair material out of the defect and repeat the procedure.
9. Take a wet cotton pellet, remove excess moisture from the pellet and place in the canal. Seal the access preparation with a temporary restoration for a minimum of four hours.
10. After four hours, or at another appointment, use a rubber dam and examine the ProRoot MTA root repair material. This material should be hard. If not, rinse and repeat the application.
11. When the ProRoot MTA root repair material is hardened, obturate the remaining canal space. The ProRoot MTA root repair material remains as a permanent part of the root canal filling.

INTERNAL REPAIR OF IATROGENIC PERFORATIONS:

1. Using a rubber dam, debride the root canal system using intra-canal instruments, and irrigate with NaOCl.
2. Dry the canal system with paper points and isolate the perforation.
3. Obturate all the canal space, apical to the perforation.
4. **PREPARE THE PROROOT MTA ROOT REPAIR MATERIAL ACCORDING TO THE MIXING INSTRUCTIONS PROVIDED.**
5. Using the carrier, dispense the material into the perforation site. Condense the ProRoot MTA root repair material into the perforation site using a small plugger, cotton pellets or paper points.
6. Confirm placement of the ProRoot MTA root repair material with a radiograph. If an adequate barrier has not been created, rinse the ProRoot MTA root repair material out of the canal and repeat the procedure.
7. Take a wet cotton pellet, remove excess moisture from the pellet and place in the canal. Seal the access preparation with a temporary restoration for a minimum of four hours.
8. After four hours, or at another appointment, use a rubber dam and examine the ProRoot MTA root repair material. This cement should be hard. If not, rinse and repeat the application.
9. When the ProRoot MTA root repair material is hardened, obturate the remaining canal space. The ProRoot MTA root repair material remains as a permanent part of the root canal filling.

ROOT APEXIFICATION:

1. Using a rubber dam, debride the root canal system using intra-canal instruments, and irrigate with NaOCl.
2. Dry the canal system with paper points and for disinfection place calcium hydroxide paste in the root canal system for one week. Place a temporary restoration to seal the access opening.
3. After one week, using a rubber dam, remove the CaOH from the canal system using NaOCl irrigation and instrument as needed. Dry the canal(s) with paper points.
4. **PREPARE THE PROROOT MTA ROOT REPAIR MATERIAL ACCORDING TO THE MIXING INSTRUCTIONS PROVIDED.**
5. Using the carrier, dispense the cement into the apical region. Condense the ProRoot MTA root repair material into the apical region of the canal with pluggers or paper points. Create a three- to five-millimeter apical barrier of ProRoot MTA root repair material.
6. Confirm placement of the ProRoot MTA root repair material with a radiograph. If an adequate barrier has not been created, rinse the ProRoot MTA root repair material out of the canal and repeat the procedure.
7. Take a wet cotton pellet, remove excess moisture from the pellet and place in the canal. Seal the access preparation with a temporary restoration for a minimum of four hours.
8. After four hours, or at a later appointment, use a rubber dam and examine the ProRoot MTA root repair material. This material should be hard. If not, rinse and repeat the application.
9. When the ProRoot MTA root repair material is hardened, obturate the remaining canal space. The ProRoot MTA root repair material remains as a permanent part of the root canal filling.

ROOT-END FILLING:

1. Gain access to the root-end and resect the root with a surgical bur.
2. With an ultrasonic tip, prepare a class I root-end cavity preparation to the depth of three to five millimeters.
3. Isolate the area. Dry the root-end cavity with paper points. Achieve hemostasis with colia plug, or similar material.
4. **PREPARE THE PROROOT MTA ROOT REPAIR MATERIAL ACCORDING TO THE MIXING INSTRUCTIONS PROVIDED.**
5. Using the carrier, dispense the material into the root-end cavity. Condense the ProRoot MTA root repair material into the cavity using a small plugger.
6. Remove excess cement and clean the surface of the root with a moist piece of gauze or Telfa®.
7. Confirm placement of the ProRoot MTA root repair material with a radiograph. The ProRoot MTA root repair material remains as a permanent part of the root canal filling.

PULP CAPPING:

1. Under a rubber dam, complete a cavity preparation outline using high-speed burs, under constant water cooling.
2. If caries are present, excavate using a round bur in a hand piece at low speed or use hand instruments.
3. Rinse the cavity and exposure site(s) with 2.6% - 5% NaOCl. Heavy bleeding may be controlled with a cotton pellet moistened with NaOCl.
4. **PREPARE PROROOT MTA ACCORDING TO MIXING INSTRUCTIONS PROVIDED BELOW.**
5. Using a small ball applicator, or similar device, apply a small amount of ProRoot MTA over the exposure.
6. Remove the excess moisture at the site with a dry cotton pellet.
7. Apply a small amount of Dyract Flow™ flowable compomer (or an equivalent light-cured resin, glass-ionomer liner) to cover the ProRoot MTA material, and light cure according to its instructions.
8. Etch the remaining cavity walls with 34% - 37% phosphoric acid gel for 15 seconds. Rinse thoroughly.
9. Dry the cavity gently, leaving the dentin moist, but not wet. Apply Prime & Bond NT material, or an equivalent bonding material. Cure according to its instructions.
10. Place TPH Spectrum composite material or an equivalent composite resin to complete the restoration. Cure according to its instructions.
11. At the next appointment, assess the pulp vitality. Pulp vitality and status should be assessed radiographically every three to six months or as needed.

PROROOT MTA ROOT REPAIR MATERIAL MIXING INSTRUCTIONS:

Note: ProRoot MTA root repair material does not set as quickly as other cements. Careful mixing will make the material easier to handle.

- Open a pouch of ProRoot MTA root repair material and dispense the powder onto a mixing pad.
- Pull off the end of a ProRoot liquid micro-dose ampoule and squeeze out contents onto the mixing pad next to the root repair material.
- Gradually incorporate the liquid into the cement using the ProRoot MTA mixing stick.
- Mix the material with the liquid for about one minute to ensure all the powder particles are hydrated.
- If needed (one extra ampoule is provided, sterile water can also be used), one or two drops of liquid can be added to make the material into a thick, creamy consistency. Discard the remaining liquid.

Note:

1. Adding too much, or too little liquid will reduce the ultimate strength of the material.
2. The ProRoot MTA root repair material will set over a period of four hours, but the working time is about five minutes. If more working time is needed, cover the mixed material with a moist gauze pad to prevent evaporation.