

## User guide

### Medi-MTA/Root Canal Sealer

Root canal reinforced Cement with high compressive strength.

#### **Composition:**

Calcium-aluminosilicate, Tricalcium silicate, tricalcium aluminate, tricalcium oxide, Paraformaldehyde, Zinc Oxide, Bismuth trioxide, Polyacrylic acid, Salicylate resin, diluting resin, natural resin,

#### **Applications:**

Medi-MTA/Sealer is a root canal sealer based on MTA (mineral trioxide aggregate).

Its composition provides the following qualities:

For the permanent sealing of root canals.

High radiopacity.

Low expansion during setting.

Very low solubility in contact with tissue fluids.

Optimized flow characteristics for insertion.

Does not stain the tooth.

Eugenol-free material: does not interfere with the setting of resin cements.

#### **Indications:**

Medi-MTA/Sealer is a root canal sealer intended for the permanent sealing of root canals and may be used in combination with root canal obturation materials.

Treatment of perforations of root canal and furcation

Treatment of internal resorption

Retrograde root canal filling after apical resection

Pulp capping

Pulpotomy

Apexification

Apexogenesis

#### **Contraindication:**

In patients with hypersensitivity against the resins or other components of the product.

#### **Warning:**

Medi-MTA/Sealer contains resins which may sensitize susceptible individuals. Do not use it in patients allergic to the resins or other components of the product. Avoid contact with eyes or skin. In case of contact, rinse immediately with water.

Avoid contact with oral mucosa. In case of contact, rinse with water and prevent swallowing

of product. In case any sensitivity persists, seek medical attention promptly. If the syringe becomes contaminated with saliva or blood during application, dispose of the syringe and do not use on an additional patient.

#### **Precaution:**

During the use of this product, it is recommended the patient and professional use suitable protective clothing, eye protection and gloves.

#### **Storage:**

Keep in dry and cool place, away from humidity and sources of heat. Do not store in the refrigerator. Keep the product tightly capped.

#### **Directions of use:**

**1. Root canal preparation:** Prior to insertion of Medi-MTA Sealer, the root canal should be prepared and cleaned according to the selected endodontic technique. The device requires an isolated dry field; therefore, moisture found in the canal or in the ambient humidity is sufficient to initiate Medi-MTA Sealer hardening

#### **2. Mixing:**

Dual syringe: The dual syringe ensures equal mixing in a 1:1 ratio. Press plunger to extrude material directly onto a glass slab, mixing pad or into the tooth canal. The cement should be used immediately after mixing.

Tubes: Mix equal volume units (1:1). Mix for 30 seconds to a homogeneous consistency.

#### **3. Insertion:**

Use Medi-MTA Sealer with gutta-percha or silver points, coating them with a thin layer of the cement and filling the root canal according to the selected technique. Medi-MTA Sealer can be applied in the root canal with a Lentulo spiral or, directly, with an applicator tip adapted to the self-mixing tip.

#### **Attention:**

The self-mixing tip must be discarded after use.

#### **4. Removal of the root canal filling:**

Use the conventional techniques for the removal of gutta-percha fillings.

#### **5. Working time: 28 minutes**

#### **Powder mixture:**

The powder mixed with distilled water forms a gel, which cures in a humid environment. The material starts setting after approximately 10 minutes and the final setting time is 15 minutes. It is not necessary to wait for the final setting to continue the treatment procedure. The pH after mixing is 10 and increases during the next 3 hours to 12 (strongly alkaline), which prevents microbial growth. The Filling material shows a radiopacity, which is close to the one of standard Gutta Percha points and higher than the ones of dentine and bone allowing an easy detection of the material on the radiograph. The hardened material shows a nominal compressive strength of 65 Mpa.

#### **Medi-MTA Sealer Powder form.**

#### **Directions for use:**

1-Place on a glass slab three scoops of Medi-MTA Sealer powder and add 2-3 drops of distilled water next to the Powder.

Mix Medi-MTA sealer by gradually bringing the liquid into the powder and mix it evenly for 30 seconds. The mixture must show

a creamy consistency

2-Place the mixture immediately on the selected site with an appropriate applicator.

3-After application, condense the material with a condenser or absorbent paper point moistened with distilled water.

**Attention:**

Use the prepared Medi-MTA sealer immediately after mixing. The product dehydrates very quickly and must be discarded if this happens.

Clean the applicator immediately after the placement of the material. If the material hardens inside the applicator it cannot be removed anymore, thus making the instrument inoperative

Do not use Medi-MTA sealer to fill a complete root canal

Do not use Medi-MTA Sealer in contact with the gingival sulcus. This would lead to complete dissolution of the material

Acidic pH (lesions) prevents the setting reaction of Medi-MTA Sealer.

The information provided in this manual is based on laboratory and clinical studies. The successful use of MTA depends on a correct diagnosis, the operative technique, the condition of the treated tooth and the general health of the patient

In case of eye or skin contact, wash immediately with water. Use eye protection, mask and gloves when handling Medi-MTA Sealer.

**Storage:**

Medi-MTA Sealer must be stored in its original packaging at room temperature. Protect from humidity and light.

**Shelf-life:** 3 years from manufacturing date.

Packag:

Powder: 10g

Liquid: 15ml

**For dental professional use only.**



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