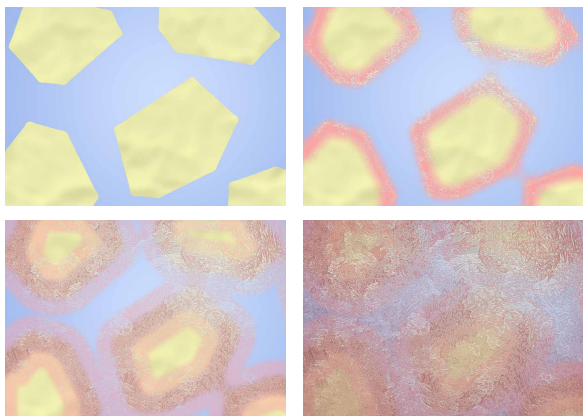




Upon contact with biological fluids in the root canals, ActaSeal undergoes a hydration reaction, releasing calcium ions and forming hydroxyapatite crystals.

The reaction forms a hybrid, mineral-rich layer at the interface between the sealer and the dentin, creating micro-mechanical anchorage and strong adhesion. With outstanding adhesive properties, high biocompatibility, negligible shrinkage, and high purity, this bioactive mineral formulation offers significantly greater long-term success than other obturation techniques.



**Calcium Silicate** produces CSH (Calcium Silicate Hydrate) gel by absorbing the moisture from surrounding tissues in the root canal and some crystallization of Calcium Hydroxide ( $Ca(OH)_2$ ).

# ActaCal

Calcium-Silicate-Based BC **SEALER**

Calcium-Silicate-Based Bioceramic Sealer for 1/3 of the competition, at just

**\$49.99**

Call:

**(262) 501-0075**

or visit:

[www.EngineeredEndo.com](http://www.EngineeredEndo.com)

**endodontic**<sup>®</sup>  
SOLUTIONS  
by **engineered endodontics**

# ActaCal

Calcium-Silicate-Based BC **SEALER**

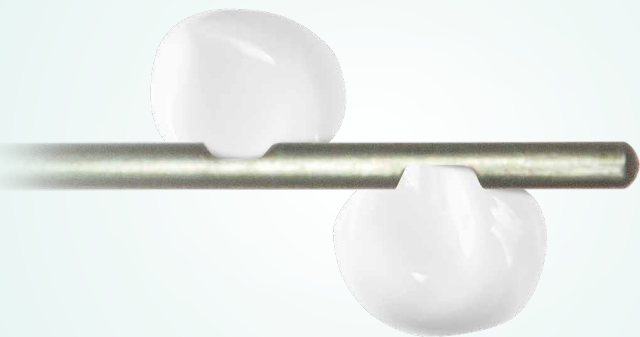


Pre-mixed, Bioactive, Bioceramic, Calcium-Silicate-Based MTA Root Canal Sealer



## Features & Benefits:

- Designed to promote setting and maximize bioactivity
- Promotes the formation of hydroxyapatite on the surface to seal and support healing through the release of calcium and hydroxide ions
- Safe and gap-free healing: calcium silicate based sealer has the feature of being both lipophilic and hydrophilic which create a gap free bond with zero shrinkage.
- Biocompatible, non cytotoxic, non genotoxic, initially high in pH (alkaline/basic), which has shown to be antimicrobial in vitro
- Works with both warm vertical and single cone obturation techniques
- Time saving safe direct application utilizing specially designed paste delivery tips
  - Dual Side Vent Needle Visible, 3D controlled placement
  - Closed-end Needle prevents extrusion beyond apex
  - 1x 2-gram syringe with 10 3DPD (3-dimensional paste delivery) tips

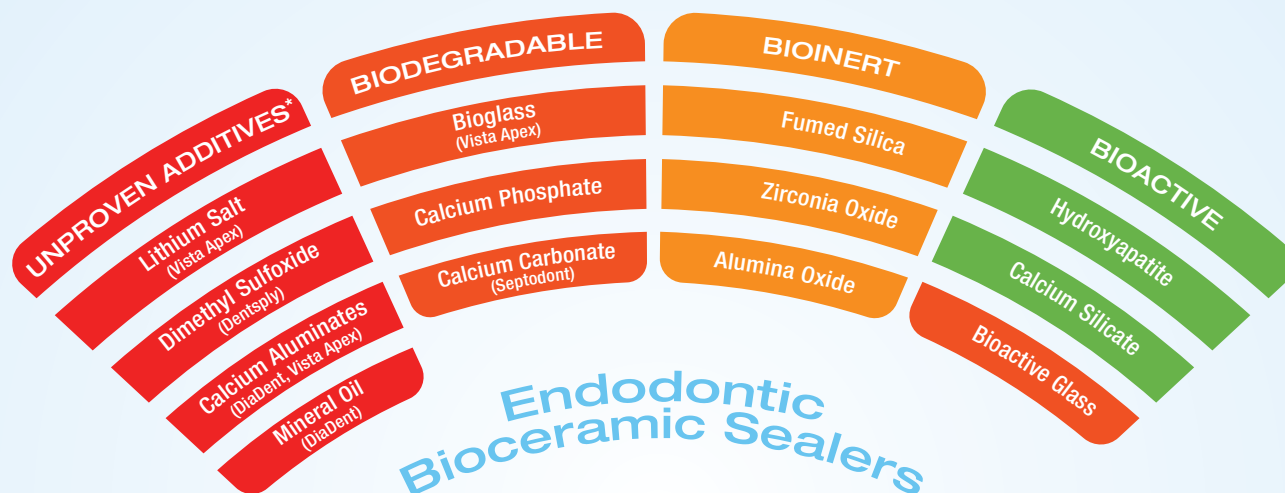


### 3DPD (3-Dimensional Paste Delivery) Tips

have been scientifically designed to reduce the consequences of canal paste overfills.

3DPD Tips feature closed-end dual side port design to eliminate the possibility of apical extrusion, while allowing for easy placement of viscous materials. The tips also incorporate “low dead space” design reducing, material waste by 80% compared to over tips.

You have a lot of options for endodontic sealers... However, they are not all formulated equally! Calcium silicate based endodontic sealers are the only bioceramic formulations proven clinically with over 50 million cases performed worldwide.



	Calcium-Silicate- Based (>15%)	Radiopacity (mm Al)	Solubility (%)	Flow (mm)	Set Time	Price (\$/gram)
<b>ActaCal Sealer</b> Endodontic Solutions	<b>Yes</b>	<b>7</b>	<b>&lt;1.0</b>	<b>&gt;17</b>	<b>3.5 hrs</b>	<b>\$22.50</b>
<b>Endo Sequence BC</b> Brasseler	<b>Yes</b>	<b>7</b>	<b>2.9</b>	<b>23.1</b>	<b>&lt; 24 hrs</b>	<b>\$80</b>
<b>Edge BC</b> Edge Endo	<b>Yes</b>	<b>6</b>	<b>&lt;3</b>	<b>23.2</b>	<b>&lt; 24 hrs</b>	<b>\$64</b>
<b>Dia Root BIO</b> DiaDent	<b>No</b>	<b>8</b>	<b>1.0</b>	<b>22</b>	<b>&lt; 24 hrs</b>	<b>\$32.50</b>
<b>CeraSeal BC</b> MetaBiomed	<b>No</b>	<b>8</b>	<b>&gt;3</b>	<b>23</b>	<b>&lt; 24 hrs</b>	<b>\$65</b>
<b>ReGen BA EndoSealer</b> Vista Apex	<b>No</b>	<b>8</b>	<b>1.0</b>	<b>23.4</b>	<b>&lt; 24 hrs</b>	<b>\$42.50</b>
<b>NeoSealer Flo</b> Avalon Biomed	<b>Yes</b>	<b>6</b>	<b>&lt;3</b>	<b>&gt;17</b>	<b>&lt; 24 hrs</b>	<b>\$51.50</b>
<b>AH Plus BC</b> Dentsply Sirona	<b>No</b>	<b>9</b>	<b>1.4</b>	<b>21.3</b>	<b>&lt; 24 hrs</b>	<b>\$50</b>
<b>BioRoot Flow</b> Septodont	<b>Yes</b>	<b>6</b>	<b>1.5</b>	<b>23.2</b>	<b>&lt; 24 hrs</b>	<b>\$54</b>

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