



VISTA | APEX

# IRRIGATION SOLUTION GUIDEBOOK

Leverage Vista Apex's Irrigation  
Solutions to maximize more effective  
outcomes for your patients.



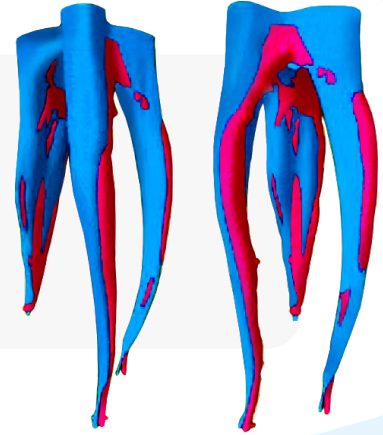
# THE PURPOSE OF IRRIGATION

As a leader in endodontic irrigation, Vista Apex provides innovative solutions to thoroughly cleanse even the most difficult anatomy. Vista Apex's line of enhanced irrigants and delivery systems, paired with ultrasonic activation, offer a simple effective irrigation protocol.

A research study\* by Dr. Ove Peters illustrated that conventional hand instrumentation leaves approximately 35% of the canals untouched.

**RED** - areas that have not been treated with endodontic instruments and remain infected.

**BLUE** - areas after preparation that have been treated by hand or rotary instruments. Nickel titanium and stainless-steel instruments leave a sufficient amount of the canal covered in smear layer, leaving the canals populated with bacteria and debris.



## Selecting the Right Tip

Whether you need side venting of irrigants for extra control, or side-port delivery for sensitive areas, we have the Irrigating Tips you need in a variety of gauges and quantities!

### Appli-Vac

Slotted and side-vented for safe irrigation

### Vista-Probe Irrigating Tips

Closed-end tip for side-port delivery, the lateral delivery of irrigants reduces apical pressure

## CanalClean Irrigation Kit

Save time, save money. Through research and testing, Vista has developed its CanalClean™ 2S Irrigation Kits to provide EXACTLY what Endodontists need for improved outcomes in cleansing root canals.

Offers everything needed for optimal canal cleanliness, in a convenient 2 solution kit. Saves you time, eliminating the need for EDTA, CHX, and a rinsing agent! Chlor-XTRA™ and SmearOFF™ are 100% compatible and WILL NOT form a precipitate when mixed, making irrigation simple & predictable.

The kits are convenient and easy-to-use, and COST NO MORE than buying individual components.



CanalClean™  
Irrigation Kit

### Kit Options

#### 504700-2

#### Standard Kit

- 1 x 12cc Chlor-XTRA™ (6% NaOCl)
- 1 x 6cc SmearOFF™ 2-in-1
- 2 x 30ga Appli-Vac™ side-vented irrigating tips
- 1 x Micro Aspirator with tip





Chlor-XTRA™

### Kit Options

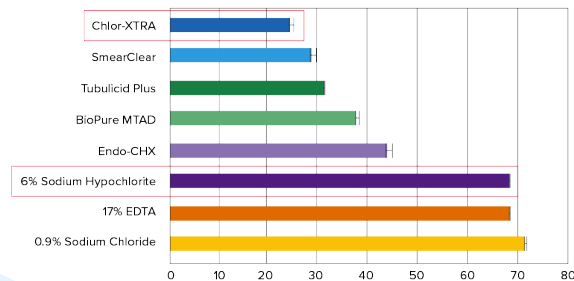
- 503825-2 Chlor-XTRA™ 3mL Prefilled Syringes**
  - 10 x 3mL pre-filled syringes
  - 10 x Appli-Vac™ 27ga side-vent irrigating tips
- 503850-2 Chlor-XTRA™ 12mL Prefilled Syringes**
  - 10 x 12mL pre-filled syringes
  - 10 x Appli-Vac™ 27ga side-vent irrigating tips
- 503800-2 Chlor-XTRA™**
  - 1 x 16oz. (480mL) bottle

## Chlor-XTRA™

This 6% Sodium Hypochlorite formula, enhanced with powerful wetting agents and propriety surface modifiers, penetrates into lateral canals and isthmuses by lowering the surface tension. This more powerful oxidizing agent is over 2 times thinner than standard Sodium Hypochlorite and 2 times more digestive.

## ADA Professional Product Review

Surface Tension [mN/m]

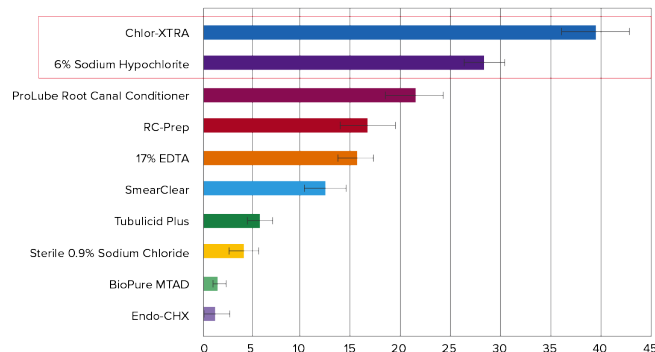


### Clinically Proven To:

- Work 4X FASTER than ChlorCid®\*
- REDUCE post-treatment complications
- IMPROVE contact and dissolve more tissue
- INCREASE lubricity
- DECREASE surface tension

## ADA Professional Product Review

Percent Tissue Weight Loss in Five Minutes



Chlor-XTRA is statistically significantly better at dissolving tissue than 6% Sodium Hypochlorite

## Save Time, Irrigation Solution, and Money with the Luer-Lock Bottle Cap

Conventional solution bottles trap a significant amount of material inside, sometimes causing more material to be wasted in the bottle than is used clinically. With the Luer Lock Bottle Cap, syringes can be filled efficiently while avoiding splatter and spills. This method transfers solutions directly from the bottle to a syringe without waste resulting in saving time and money.

Simply attach any standard Luer-Lock syringe to the cap and draw the volume you need directly from the bottle.





SmearOFF™ 2-in-1

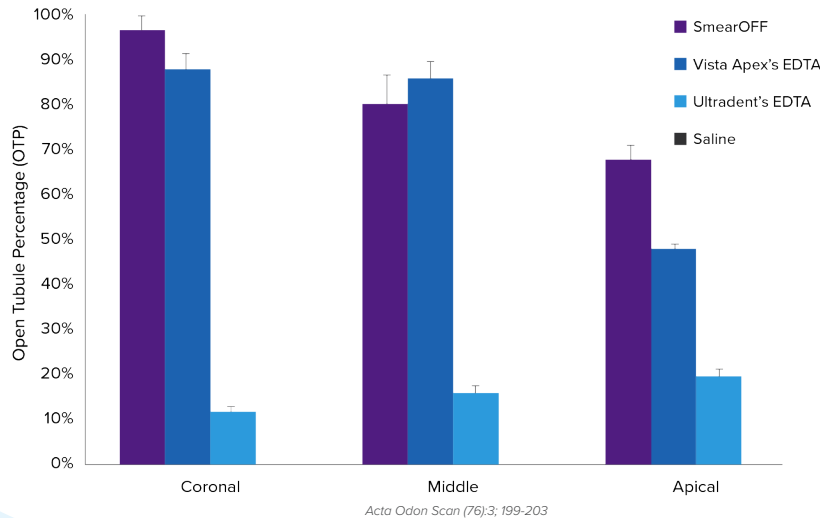
### Kit Options

- 317112-2 SmearOFF™ 2-in-1**
  - 1 x 4oz. (120mL) bottle
- 317111-2 SmearOFF™ 2-in-1**
  - 1 x 16oz. (480mL) bottle

## SmearOFF™ 2-in-1

- Proprietary EDTA/CHX mix with wetting agents and surface modifiers
- Optimizes smear layer removal
- **NO RINSE NEEDED** - Will not form a precipitate when used with NaClO
- Superior chelation compared to 17% EDTA
- Low surface tension for enhanced penetration into dentinal tubules

	Removes Smear Layer	Kills Bacterial Incl. E. Faecalls	2-in-1 Solution	480mL Bottle	Irrigation Procedure	Precipitate When Mixed Directly with NaOCl	Cost/mL
SmearOFF™	X	X	X	X	2 Step	No	\$0.16/mL
Qmix® Brand	X	X	X	X	3 Step	Yes	\$0.31/mL
Irritrol® Brand	X	X	X	X	3 Step	Yes	\$0.17/mL



SmearOFF™ is more effective at smear layer removal than EDTA

Vista's EDTA 17% is more effective than Ultradent's EDTA 18% (due to pH differences; 8.5 vs 11.4, respectively)

For best outcomes, our patented 2-in-1 mix effectively replaces two commonly used solutions: EDTA and CHX.

SmearOFF™ removes inorganic debris and facilitates flushing of canal debris!

### Study A. J Endod. 2017 Aug;43(8):1354-1359



## EDTA - 17% Solution

- Removes smear layer and dentin mud  
Prepares dentin walls for better ADHESION of filling materials
- Opens dentin tubules
- Enhances cleansing
- Specifically engineered with LOWER pH for optimal performance



EDTA - 17% Solution

### Kit Options

- 317011-2**     **EDTA - 17% Solution**  
• 1 x 16oz. (480mL) bottle

As pH increases, the availability of calcium ions from hydroxyapatite for chelation decreases. A study (see Study A on previous page) using concentrations of alkaline (pH 11.3) solutions of EDTA showed them to be less effective in removing the smear layer.



Sodium Hypochlorite

### Kit Options

- 317018-2**     **Sodium Hypochlorite 3%**  
• 1 x 16oz. (480mL) bottle
- 317008-2**     **Sodium Hypochlorite 6%**  
• 1 x 16oz. (480mL) bottle
- 502355-2**     **Sodium Hypochlorite 3% 3mL Syringe**  
• 10 x 3mL prefilled syringes  
• 10 x 27ga Appli-Vac™ side-vent irrigating tips
- 502350-2**     **Sodium Hypochlorite 6% 3mL Syringe**  
• 10 x 3mL prefilled syringes  
• 10 x 27ga Appli-Vac™ side-vent irrigating tips
- 502315-2**     **Sodium Hypochlorite 3% 12mL Syringe**  
• 10 x 12mL prefilled syringes  
• 10 x 27ga Appli-Vac™ side-vent irrigating tips
- 502300-2**     **Sodium Hypochlorite 6% 12mL Syringe**  
• 10 x 12mL prefilled syringes  
• 10 x 27ga Appli-Vac™ side-vent irrigating tips

## Sodium Hypochlorite

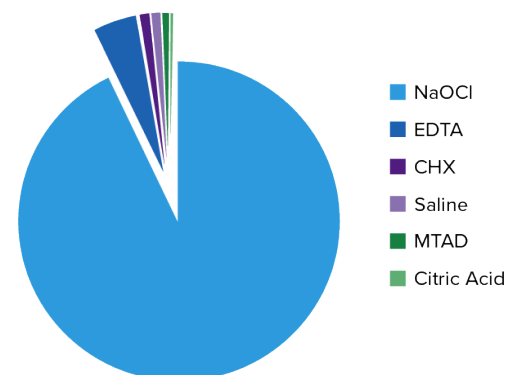
- Used for irrigation and debridement of root canals during and after instrumentation
- Provides tissue dissolution and disinfection
- Pharmacy controlled, dental indicated NaOCl to ensure consistency and safety
- Available in 3% or 6% concentrations

Sodium Hypochlorite (NaOCl) naturally degrades due to exposure to light, oxygen, heat, and metals. If the concentration is too low, it is not effective.

	Over-the-Counter NaOCl	Vista Apex NaOCl
Pharmacy-controlled for Consistency & Safety	NO	YES
Verified Concentration	NO	YES
Quality Controlled	NO	YES
Dissolves Pulpal Tissue	UNKNOWN	YES
Validated Shelf Life & Expiration Date	NO	YES
Intended for Clinical Use	NO	YES

\*If NaOCl concentration is too low, there is a reduction in pulpal tissue dissolution and antibacterial properties

### Primary Irrigant Used



## CHX Restorative

2% chlorhexidine gluconate solution used as a final rinse after instrumentation to irrigate and cleanse the root canal system



CHX Restorative

### Kit Options

317010-2

CHX Restorative

- 1 x 16oz. (480mL) bottle



CHX-Plus™

### Kit Options

503900-2

CHX-Plus™

- 1 x 16oz. (480mL) bottle

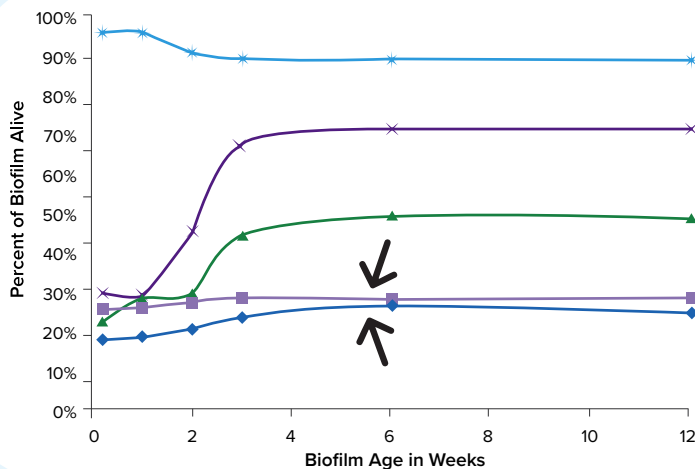
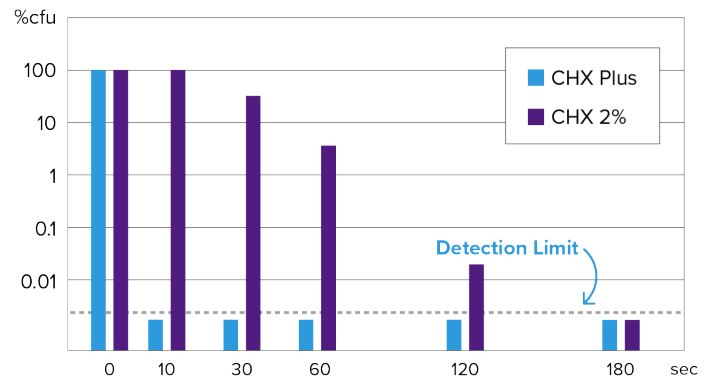
## CHX Plus™

- 2% Chlorhexidine Gluconate (CHX) enhanced with powerful wetting agents and proprietary surface modifiers
- Added surfactants lower surface tension, improving depth of penetration
- Promotes adhesion of sealers and obturation materials

Patented & Clinically proven to outperform standard CHX solutions

- Improved effect on cleansing and removing of biofilms
- Synergistic effect of engineered irrigants with ultrasonic activation<sup>2</sup>
- Superior purifying properties on multi-species biofilm<sup>3</sup>

### Killing of Planktonic *E. faecalis*



Mature biofilms are more resistant to CHX, however CHX-Plus treatment for 3 and 10 minutes did not lose effectiveness