

e-ROOT

Make Endo Great



C-Root Dental Medical

C-Root is committed to advancing the field of root canal treatment by spearheading the research, development, and global production of state-of-the-art bio-materials and cutting-edge devices.

C-Root SP Bioceramic Root Canal Sealer

Patented Strontium Silicate

C-Root SP is a premixed and injectable bioceramic Root Canal Sealer with a patented and innovative strontium silicate formula, specifically designed to seal the complexities within the root canal system during obturation. This innovative sealer not only promotes effective healing and mineralization but also ensures safe and effective permanent root canal filling and sealing.

Composition

Strontium Silicate, Zirconia, Calcium Phosphate, and Calcium Hydroxide.

Function

Root Canal Sealing and Permanent Filling. It is suitable for lateral condensation/compaction technique, single cone obturation technique, and vertical condensation technique.

Indications

Permanent filling of root canal after it has been cleaned and disinfected properly.

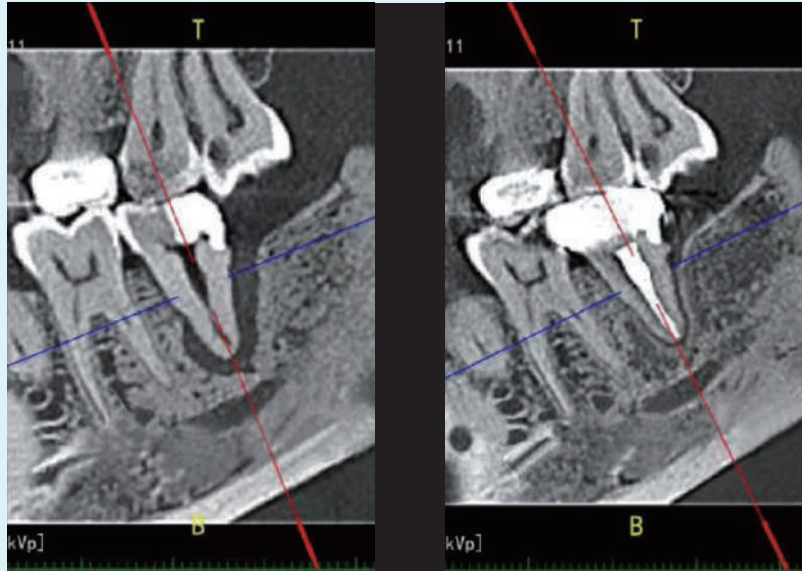


	Your Current System	C-Root SP
Biocompatible and osteogenic	?	✓
Rapid periapical healing	?	✓
Consistent flow	?	✓
Construct strong chemical bonding between sealer material and dentin	?	✓
Mild post-op reaction	?	✓
Affordability	?	✓
High antibacterial(pH > 12)	?	✓
Zero shrinking	?	✓
Successful sealing	?	✓
Enhanced ability to promote bone healing	?	✓
Strontium element can promote osteogenesis as well as angiogenesis	?	✓
Anti-inflammatory, greatly inhibiting inflammatory factors such as TNF- α or PGE2	?	✓

Advantages

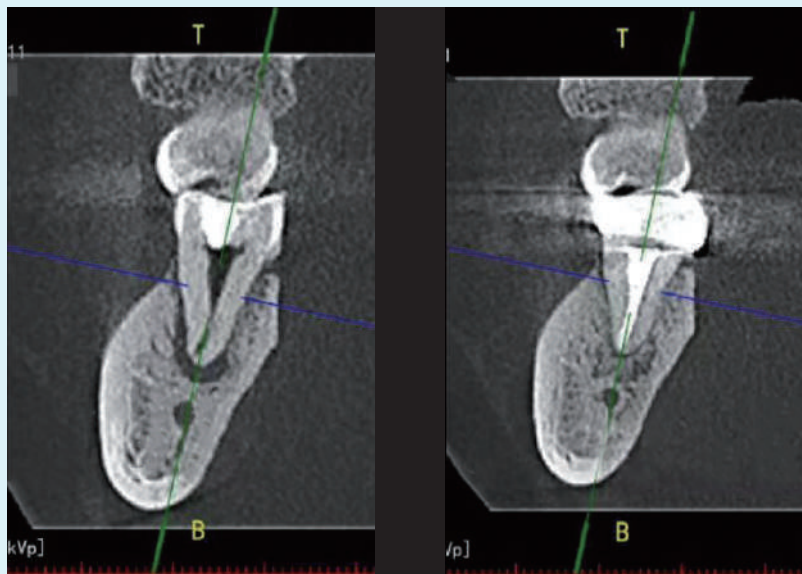
1. Outstanding osteogenic and apical healing capacity

For cases with apical lesions, C-Root SP is unparalleled in accelerating bone healing. Its ability to create a strong apical seal, coupled with the osteogenic potential of strontium silicate, promotes long-term healing and ensures successful outcomes.



immediate post-op

7 months post-op



immediate post-op

7 months post-op

By Dr.Liu



immediate post-op & 12 months post-op By Dr.Huang



immediate post-op & 3 months post-op

By Dr.Liu

immediate post-op & 3 months post-op

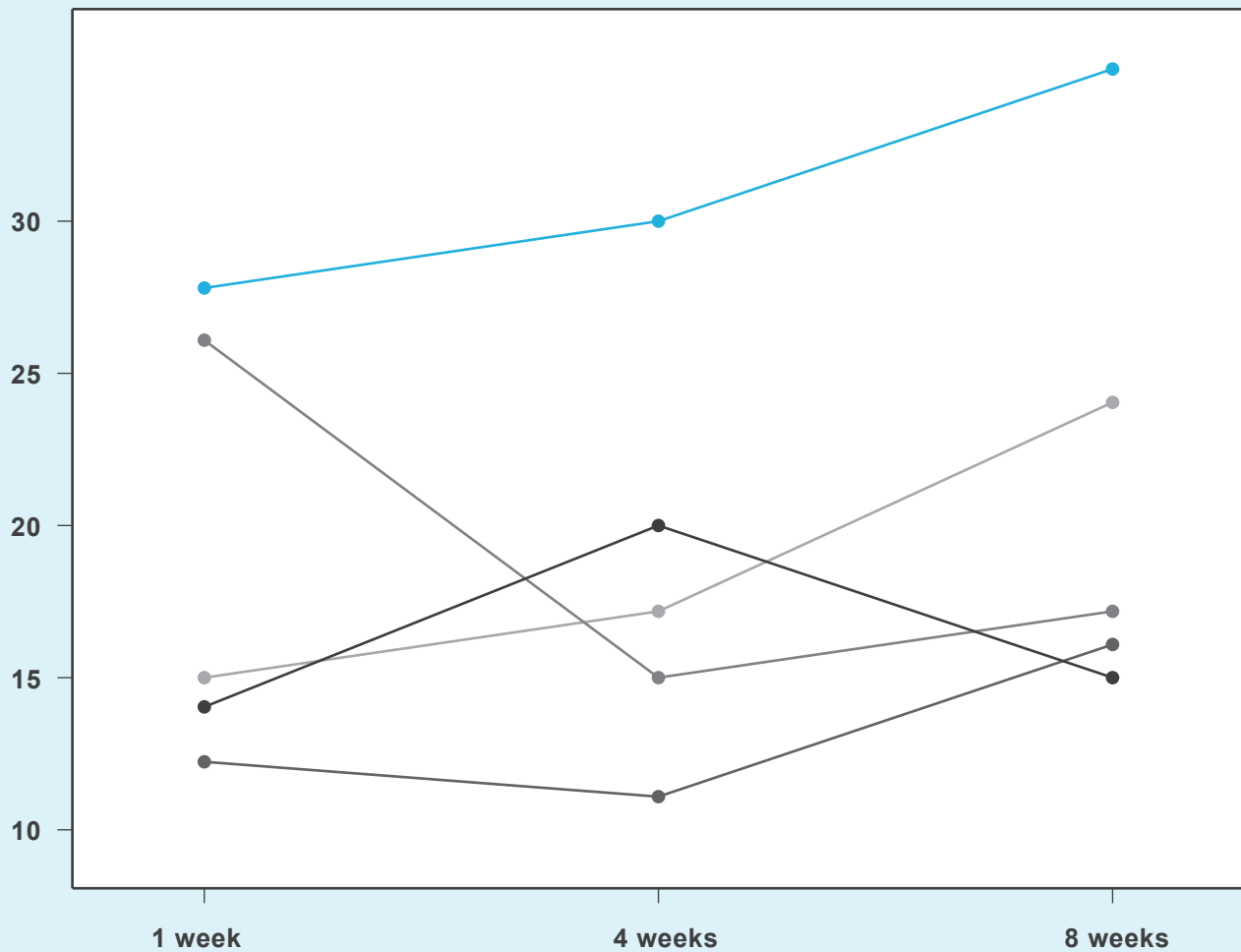
2.Highly antibacterial properties

C-Root SP, with its highly alkaline nature (pH > 12), exhibits strong antibacterial properties. A recent study demonstrated that C-Root SP kills a higher percentage of bacterial cells compared to other dental sealers, showing a progressive increase in effectiveness over time.

Percentage Of Dead Bacterial Cell Volume Over Time

Y Percentage of Dead Bacterial Cell Volume (%) by X

C-Root® SP BC Sealer™ AH Plus® Bioceramic Sealer Bio-C® Root BioRoot Flow™



Source: Mehdiyeva, V.J.*, Hleawy, A., & Shen, Y. (2024). Antibacterial Effects of Bioceramic Sealers in an Ex Vivo Model. Faculty of Dentistry, The University of British Columbia, Vancouver, Canada. Poster.

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C-Root exhibits time-dependent increases in cell proliferation and significantly higher levels of osteogenic gene expression compared to other products, suggesting its potential as an excellent alternative for promoting bone formation and regenerative effects in root canal-filling material.

—DOI: 10.1177/0300060519894801

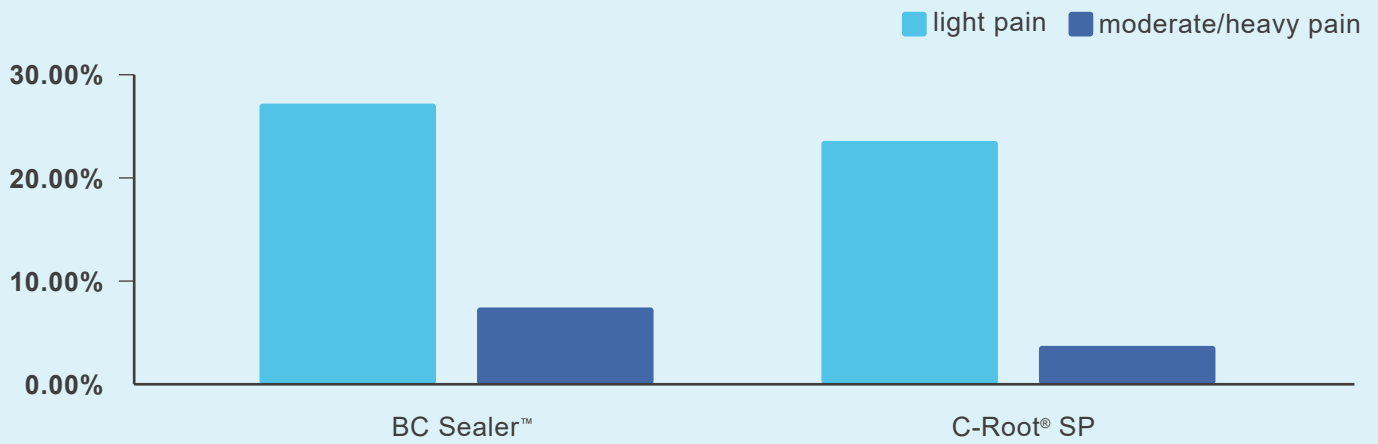
C-Root SP demonstrates favourable attributes as a root canal sealer, including effective apical sealing ability, comparable bond strength, fracture resistance, strong antibacterial effects, and good biocompatibility. These findings suggest that C-Root SP is a reliable and promising choice for root canal procedures.

—DOI: 10.19538/j.kq.2022.03.010

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3.Superior biocompatibility

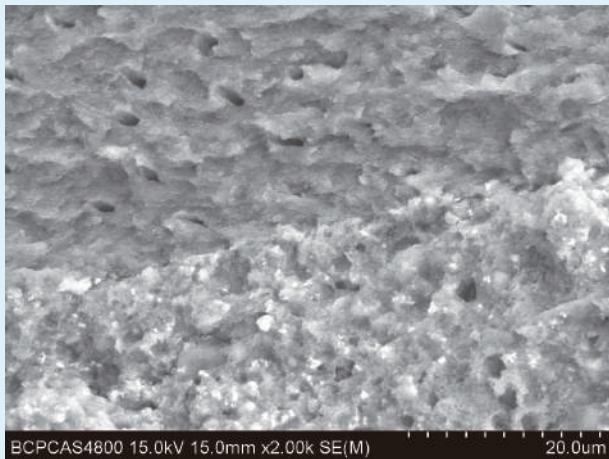
C-Root SP, utilizing strontium elements instead of calcium silicate, offers strong biocompatibility and helps alleviate inflammation and pain. A recent study found that C-Root SP, compared with other brands, postoperative pain is significantly reduced with single cone obturation method.



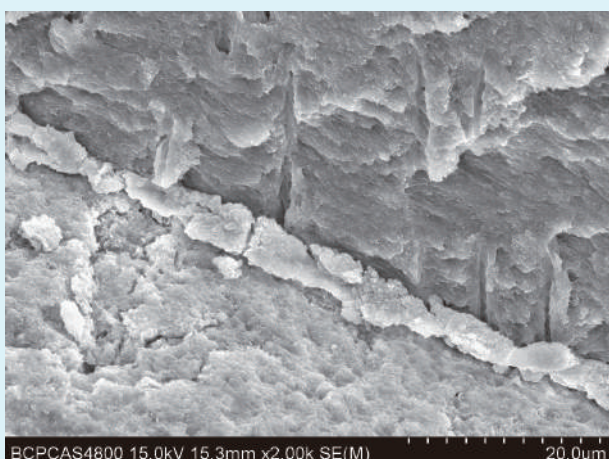
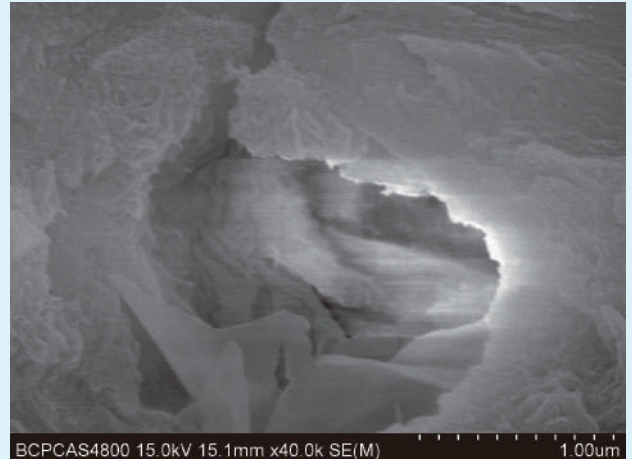
Effects of sealers extrusion on postoperative pain rate after root filling (painful cases with single cone technique over total cases) 1

4.Excellent flow and sealable

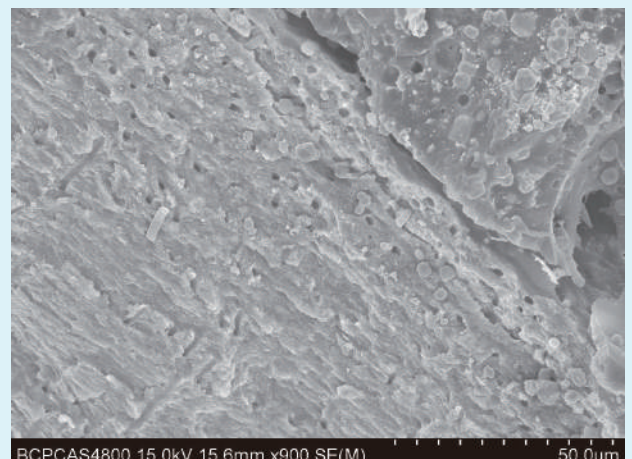
C-Root SP particles, being small and hydrophilic, can navigate the entire canal anatomy, including small lateral canals, fins, and cul-de-sacs. They can penetrate dentin tubules, promote remineralization with strontium substitution, bond to dentin and obturation materials to minimize voids, and effectively eliminate microbes, preventing their recurrence.



C-Root® SP



BC Sealer™



By Dr. Liu

1: Lei, G., BIAN, M., Li, N., Yan, M., Zhou, L., Li, Z., & Wu, J. (2023). Comparison of apical extrusion rate and postobturation pain experience of C-Root SP and iRoot SP bioceramic root canal sealers. *Oral Biomedicine*, 14(1), 29–34. <https://doi.org/10.3969/j.issn.1674-8603.2023.01.006>

C-Root BP Root Repair Material

Patented Strontium Silicate

C-Root BP is pre-mixed bioceramic root repair material, designed for optimal handling and placement efficiency, using the same patented strontium silicate as C-Root SP. Its excellent antibacterial, enhanced healing, and bioactive properties make it the premier choice for all root repair needs.

Composition

Strontium silicate, Calcium phosphate, Tantalum oxide

Indications

- Direct and indirect pulp capping
- Partial pulpotomy
- Repair of root perforation
- Repair of resorption
- Apexification
- Root-end filling
- Pulpotomy and apexogenesis
- Obturation
- Cavity liner and base

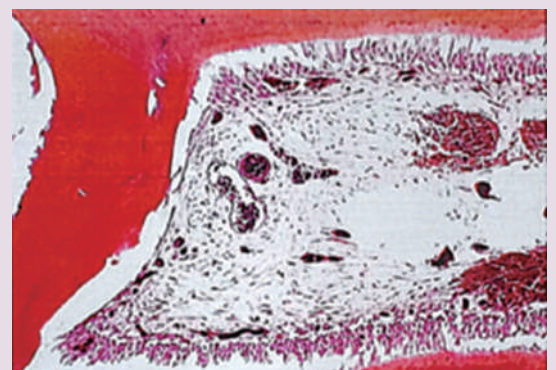


	Your Current System	C-Root BP
Fast 2 hour setting time	?	✓
Exceptionally biocompatible and osteogenic	?	✓
Superior healing outcomes	?	✓
Highly radiopaque	?	✓
Washout resistant	?	✓
Consistently moldable and condensable putty	?	✓
Antibacterial with a high pH	?	✓
Effortless to use without mixing	?	✓
Non-staining with no risk of drying out	?	✓

Advantages

1. High rate of dentin bridge formation

C-Root BP mimics the formation of protective dentin in living pulp exposures. Test results show that 70 days after filling, the dentin bridge formation rate can reach 70%. In the control group of 5 teeth tested, the rate of dentin bridge formation was 60%, 1 complete, 2 partial, and 2 absent, which was lower than the C-Root BP in the test group.



C-Root BP filled for 70 days

2. Good pulp capping effect

C-Root BP is biocompatible and has an extremely strong antimicrobial effect. Histologically evaluated, out of 10 teeth in the test group, there was no inflammatory reaction for 70 days postoperatively, making it an ideal choice for pulp capping and root canal repair procedures.

No.	Tooth position	Test Group			
		inflammation	congestion	degeneration, and necrosis	Dentin bridge forming
1	Tight upper I1	Grade 0:No inflammation	no	no	no
2	Tight upper I2	Grade 0:No inflammation	no	no	complete
3	Tight upper I3	Grade 0:No inflammation	no	no	complete
4	Tight lower I2	Grade 0:No inflammation	no	no	partial
5	Tight lower I3	Grade 0:No inflammation	no	no	no
6	Tight upper P2	Grade 0:No inflammation	no	no	complete
7	Tight upper P3	Grade 0:No inflammation	no	no	no
8	Tight lower P2	Grade 0:No inflammation	no	no	partial
9	Tight lower P3	Grade 0:No inflammation	no	no	partial
10	Tight lower P4	Grade 0:No inflammation	no	no	partial

3. Enhances osteogenesis, promotes effective bone repair

The main component of C-Root BP is strontium silicate, strontium bioceramics in the role of osteoblasts, 28 days to start in situ bone formation, but also inhibit the growth of osteoclasts, showing good bone repair effect.



immediate post-op



3 months post-op

C-Root Rotary Ni-Ti Files

Excellent for Curved Canal Shaping



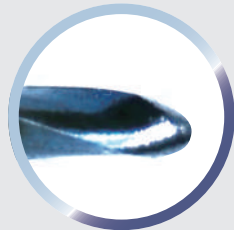
C-Root blue files are manufactured by a disruptive heat treatment technology, which raises the martensite phase transition point to 40°C.

- ◆ C-Root files' flexibility and rigidity are fine-tuned, which can be easily sensitized manually by simply pre-bending the file tip.
- ◆ C-Root files with exceptional ability to perfectly navigate curved root canals easily.
- ◆ C-Root files are undoubtedly a pivotal component of your root canal treatment toolkit.



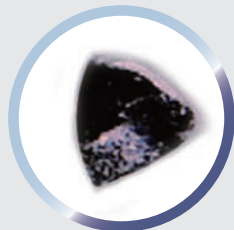
High Anti Cyclic Fatigue

C-Root Files achieve 3 times the industry standard in torsional strength, which is crucial for preventing instrument separation.



Flexibility

C-Root Files excel in pre-bending and seamlessly match canals' shape. It presents 1/5 of the industry standard bending strength, offering pre-bending flexibility and adopting a snake-shaped form to match glide paths precisely.



Rapid Cutting

C-Root Files ensure robust edge strength, featuring a triangular cross-section and sharp edges for efficient performance at a high speed of 500rpm, ultimately saving valuable time in root canal preparation.



By Dr.Rahman



By Dr.Han

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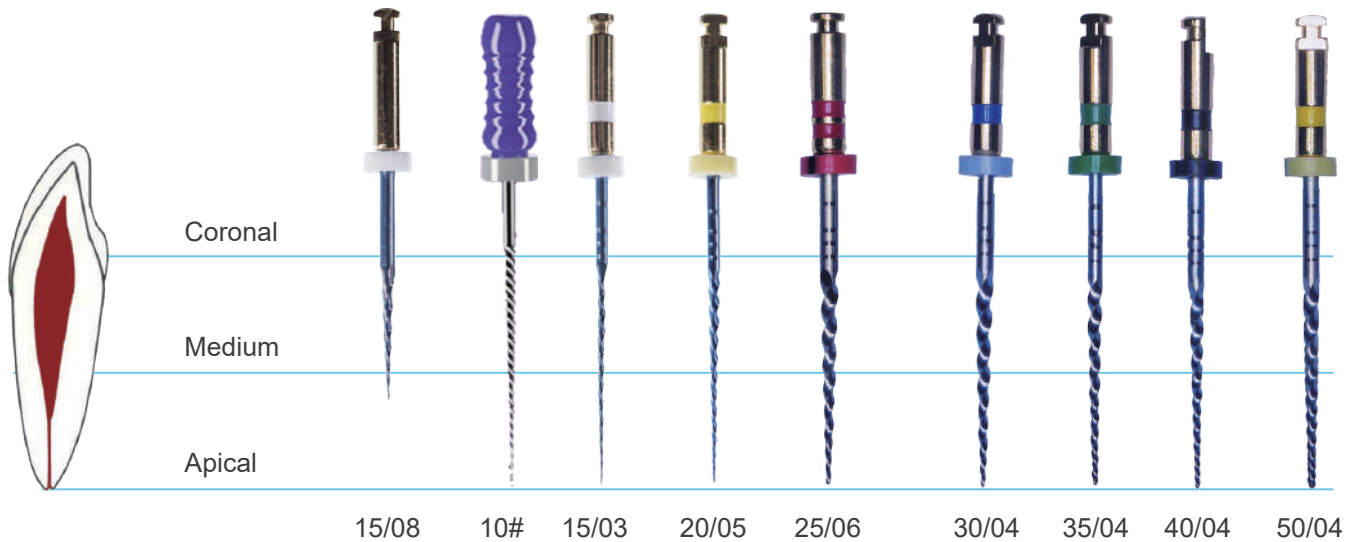
Balanced rigidity and flexibility, excellent navigation in curved root canals.

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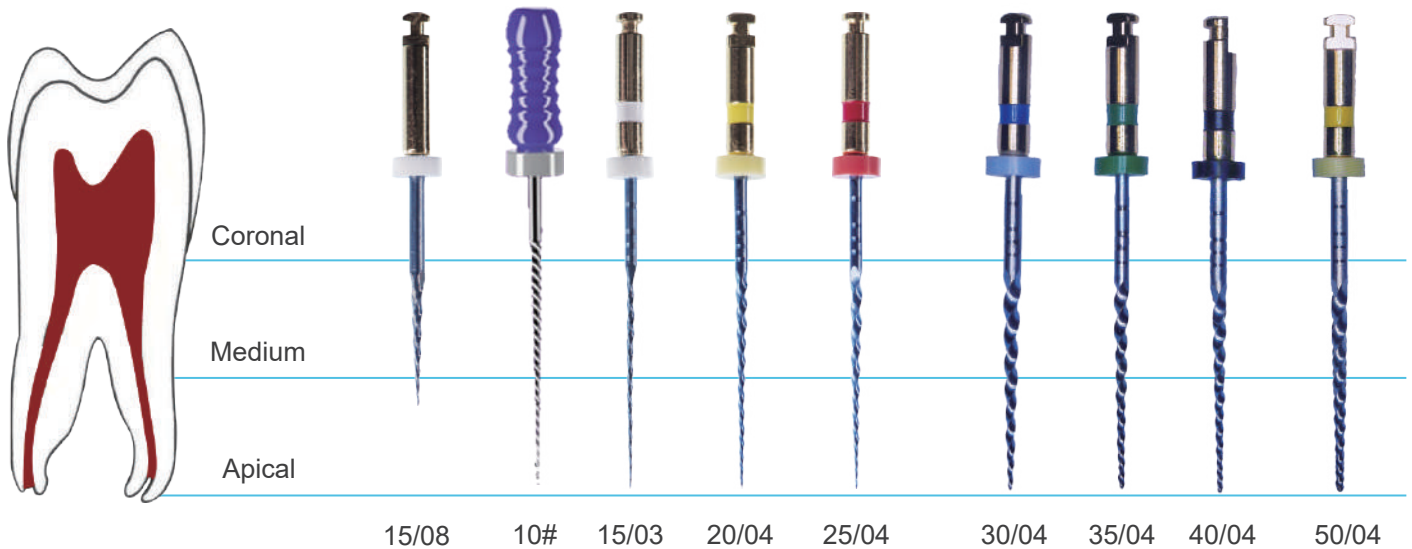
Instructions for Use

1. Filing technique: The shaping file tip exerts no cutting force. Employing the up-and-down filing technique for canal preparation is recommended. Use a #10 hand K-file for initial negotiation, then sequentially use the files.
2. Dipping in C-Root EDTA Gel is recommended to maximize the file performance.
3. Possessing shape memory: the files regain their original straight form during sterilization. If unwinding is observed after sterilization, discontinue use.

C-Root Blue 06, for Easy Canal



C-Root Blue 04, for Complex Root Canal



MODE	OPEN	PATH	FINISHING		
TAPER	08	03	04 / 05	04 / 06	04
DIAMETER	15	15	20	25	30/35/40/50
LENGTH	19mm		21mm - 25mm - 31mm		
TORQUE	2.5 N.Cm	1.5 N.Cm	2.5 N.Cm	2.5 N.Cm	2.5 N.Cm
SPEED	500 RPM	300 RPM	500 RPM	500 RPM	500 RPM

Make Endodontics Great

C-Root Leak Seal

It is ideal for challenging seals on compromised teeth/roots, adhering effectively to wet surfaces.

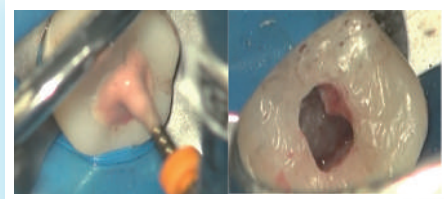
- ◆ Non-setting, ideal for intricate work
- ◆ Liquid-proof and liquid-resistant
- ◆ Outstanding adherence to wet surfaces
- ◆ Rinse with water after use



C-Root EDTA Gel

It is a water-soluble gel base comprising 17%~22% EDTA and 5%~12% urea peroxide.

- ◆ Good for coating file tips
- ◆ Eliminated stained layer
- ◆ Real-time lubrication to prevent file breakage
- ◆ Microbubble-assisted chip and debris evacuation during cutting



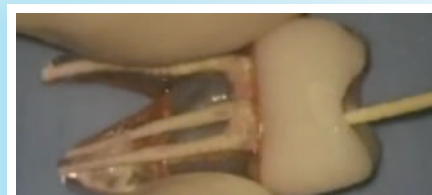
C-Root Rotary Ni-Ti Files

	ID	Taper	Size	Length			
				19mm	21mm	25mm	31mm
Individual Pack(4pcs)	○	.08	15	●			
Individual Pack(4pcs)	○	.03	15		●	●	
Individual Pack(4pcs)	●	.04/ .05	20		●	●	●
Individual Pack(4pcs)	●	.04/ .06	25		●	●	●
Individual Pack(4pcs)	●	.04	30		●	●	●
Individual Pack(4pcs)	●	.04	35		●	●	●
Individual Pack(4pcs)	●	.04	40		●	●	●
Individual Pack(4pcs)	●	.04	50		●	●	●
Assorted Pack(4pcs)	#1		15/.08 – 19mm, 15/.03 – 21mm, 20/.04 – 21mm, 25/.04 – 21mm				
Assorted Pack(4pcs)	#2		15/.08 – 19mm, 15/.03 – 25mm, 20/.04 – 25mm, 25/.04 – 25mm				
Assorted Pack(4pcs)	#3		15/.08 – 19mm, 15/.03 – 21mm, 20/.05 – 21mm, 25/.06 – 21mm				
Assorted Pack(4pcs)	#4		15/.08 – 19mm, 15/.03 – 21mm, 20/.05 – 25mm, 25/.06 – 25mm				
Assorted Pack(4pcs)	#5		30/.04 – 21mm, 35/.04 – 21mm, 40/.04 – 21mm, 50/.04 – 21mm				
Assorted Pack(4pcs)	#6		30/.04 – 25mm, 35/.04 – 25mm, 40/.04 – 25mm, 50/.04 – 25mm				
Assorted Pack(4pcs)	#7		30/.04 – 31mm, 35/.04 – 31mm, 40/.04 – 31mm, 50/.04 – 31mm				
Deciduous Tooth(4pcs)	#8		020/.04 - 18mm, 025/.04 - 18mm, 025/.04 18mm, 030/.04 18mm				

C-Root Calcium Hydroxide Paste

It is a premixed calcium hydroxide barium sulfate paste for root canal medication.

- ◆ No staining, thorough sterilization
- ◆ 14 days post-op: non-easy solidification
- ◆ Good flowability to the apex
- ◆ Minimal post-op symptoms



Make Endodontics Great

C-Root SP Sr Bioceramic Sealer

It is an Injectable Bioceramic Root Canal Sealer with patented strontium silicate.

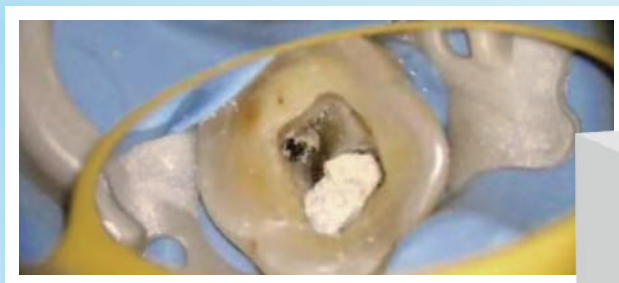
- ◆ Healing within 3 months
- ◆ Painless post-op, No symptoms
- ◆ Total seal, Total heal
- ◆ 1,000,000 RCTs, No failure feedback



C-Root BP Sr Bioceramic Repair

It is an Injectable Bioceramic Root Canal Repair Material with patented strontium silicate.

- ◆ Highly biocompatible
- ◆ No inflammation after 70 days
- ◆ 70% dentin bridge formation rate





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✉ info@crootusa.com

🌐 crootdental.com

C-Root Dental Medical Devices Co., LTD

36 Floor, 1250 Broadway, New York, NY 10001, USA