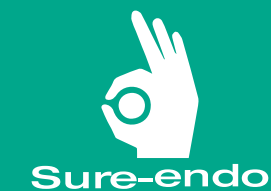


Sure Quality is on  
**Sure-endo**



# Sure-Seal Root™

Syringe type & Putty type

Bioceramic Sealing and Filling Material from  
**Sure-endo**



**Gutta Percha Points**  
**Absorbent Paper Points**

Hand-Rolled Gutta Percha points and Absorbent Paper Points for Root Canal from Sure-endo

**Just try it**  
feel the differences

Shape | Size | Handle  
Material | Size | Variety

**SURE-Cord®**  
Knitted Retraction Cord

Retraction&Hemostasis cord from Sure-endo

**Just try it**  
feel the differences

Shape | Spring | Knot

**SURE-Paste®**  
**SURE-Prep®**

Water Soluble Calcium-Hydroxide Paste and BLUE EDTA(15%) Preparation Cream from Sure-endo

**Just try it**  
feel the differences

Shape | High | Easy  
Material | Syringe | Size

**Just try it**  
feel the differences

Easy | Bio  
Stable | Natural



**Sure Dent Corporation**

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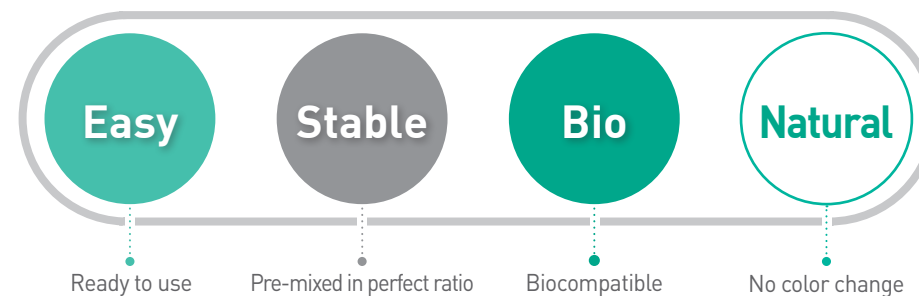
# Sure-Seal Root™

## Syringe type

Bioceramic Sealing Material for Root Canal Sealing from Sure-endo.

**Sure-Seal Root™** is a convenient premixed-ready to use calcium aluminosilicate paste developed for permanent obturation of root canal.

**Sure-Seal Root™** does not shrink and demonstrates excellent physical properties.



# Sure-Seal Root™ PT

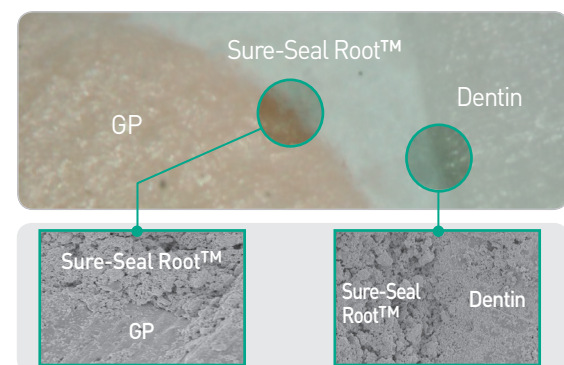
## Putty type

Bioceramic Sealing Material for pulp capping, permanent root canal repair and filling from Sure-endo.

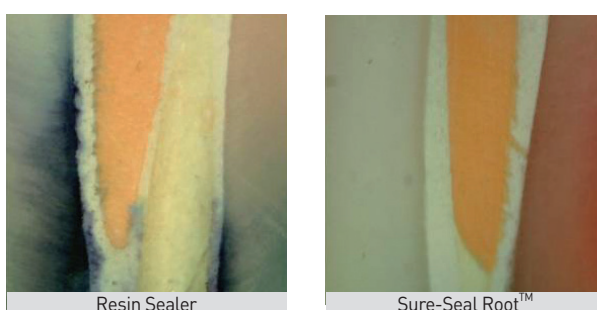
**Sure-Seal Root™ PT** is delivered by capsule containing the mixture of calcium aluminosilicate cement, liquid, and several compound particles.

**Sure-Seal Root™ PT** sets in the root without the mixing process or additional water.

The perfect seal interface among dentin, Sure-Seal Root™, and GP.



Color change comparison between Sure-Seal Root™ and Resin sealer



Best use with Sure-Seal Root™ Bio GP Points  
Bioceramic Coated and Impregnated



- Available Size: Taper .04 / .06
- Contents: 60p / Slide box

## Syringe Type

### Property

Setting time	Initial within 25 mins
	Final within 150 mins
Flow	24mm
Film thickness	19mm
PH (1day)	12.35
Compressive Strength (7day)	60MPa

### Advantages

- Simple**
  - Premixed and Injectable paste
  - The optimum flowability
- Biocompatibility**
  - Pure calcium aluminosilicate
  - Resin and Eugenol Free
- Nano Sealing**
  - Excellent bonding to gutta-percha and dentin
  - Micro-sized particle
  - Hydroxy apatite generation
  - Zero shrinkage
  - Hydrophilic
- High pH**
  - Calcium hydroxide are generated during setting
  - pH increases up to 12 and over
  - Alkaline environment making it highly antibacterial

### Excellent Radiopacity

### Contents

- 2g syringe × 1ea
- Length marked Capillary tip × 20ea
- Extension holder × 1ea



## Putty Type

### Property

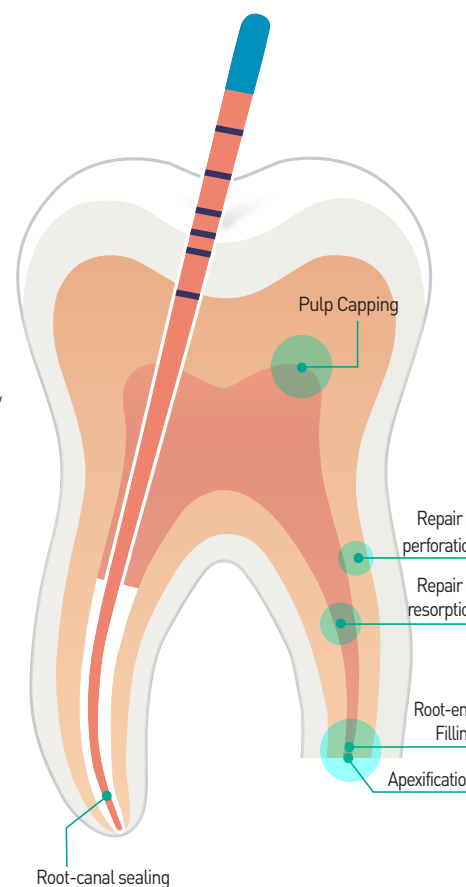
Setting time	Initial within 8 mins
	Final within 50 mins
Flow	9~11mm
Film thickness	30~40mm
PH (1day)	11.62
Compressive Strength (7day)	98.95MPa

### Advantages

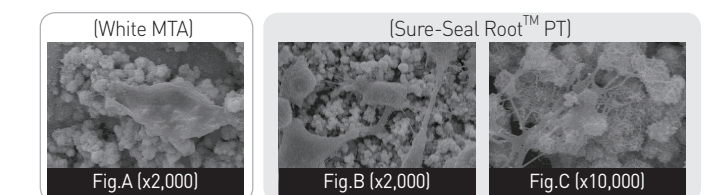
- Simple**
  - Premixed putty in capsule
  - Paste-only filling
- Time**
  - Proper setting time for application
- Strength**
  - compressive strength
- Biocompatibility**
  - Biocompatible elements
- Antibacterial effects by Alkaline pH**
- Excellent Radiopacity**
  - Easy recognition

### Contents

- 0.25g capsule × 10ea

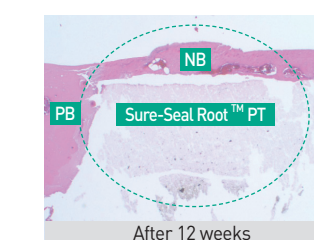


## Cell Adhesion Analysis (Surface Chemistry)



- Cell adhesion and cell spreading became more powerful in Sure-Seal Root™ PT (Fig.B) compared to White MTA (Fig.A).
- Sure-Seal Root™ PT exhibits high mineralization ability, forming extensive apatite crystals on the surface.

## Biocompatibility



- Sure-Seal Root™ PT doesn't create inflammatory response.
- Sure-Seal Root™ PT seems to promote mineralization and show bioactivity.

## Color Stability (%)

