

# SHIELD FORCE *PLUS*

*Resin-Based Light-Cured  
Desensitizer*



# SHIELD FORCE *PLUS*

***THREE YEARS OF SENSITIVITY RELIEF IN JUST 30 SECONDS***

**Shield Force Plus** is an advanced light-cured desensitizer, providing an immediate, pleasant, effective, and easy-to-use chairside solution for preventing post-restorative sensitivity and treating hypersensitive dentin.

**Shield Force Plus's Double Block Technology** offers relief for up to three years and forms two layers of protection against sensitivity. The 1st layer penetrates the dentinal tubules for immediate pain relief, while the 2nd layer forms a protective barrier on the patient's dentin, protecting it from further abrasion and future sensitivity.

## **0 Gingival Irritation**

Unlike other desensitizers, **Shield Force Plus** doesn't contain Glutaraldehyde. The product is irritation-free, therefore no need to isolate gingival tissue.

# SHIELD FORCE *PLUS*



# Why should dentists have this product in their practice?

- Shield Force Plus provides a pleasant, effective and easy-to-use chairside solution for treating hypersensitive dentin and preventing tooth sensitivity following restorative treatment for up to 3 years in only 30 seconds.



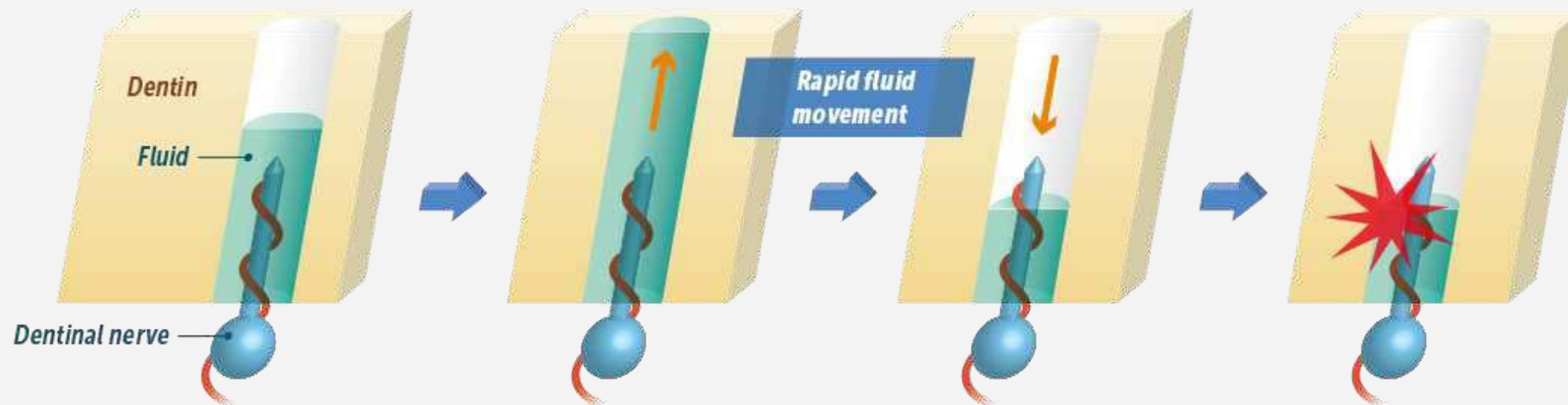
- Dentists can use Shield Force Plus for more than hypersensitivity treatment. When applied under restorations, Shield Force Plus increases bond strength and seals marginal areas of restorations.

# Indications

- Treatment of hypersensitive dentin, gingival recession, and cervical erosion
- Prevention of sensitivity after tooth preparation for direct and indirect restorations
- Reduction of abrasion and erosion of exposed dentin



# Causes of Dentinal Hyper Sensitivity

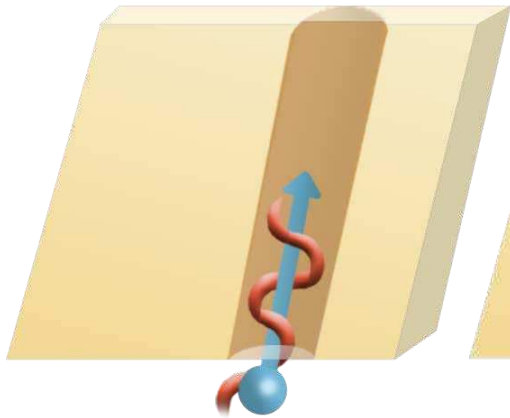


# Other techniques and how they work



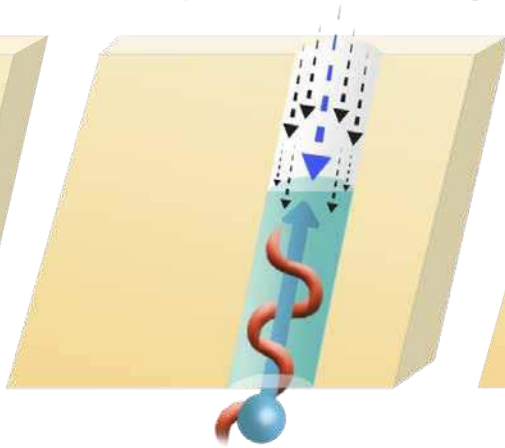
## Gluma\*

*Coagulates the fluid in tubules*



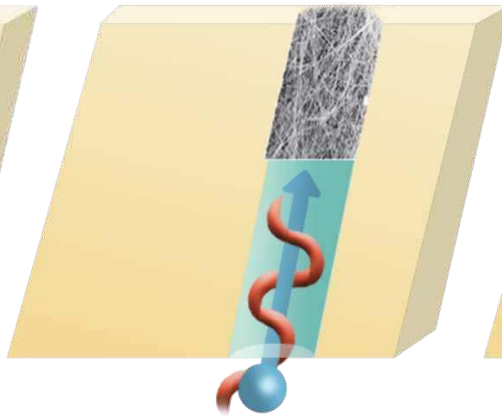
## Sensodyne\*

*Potassium Nitrate stops nerve from firing*



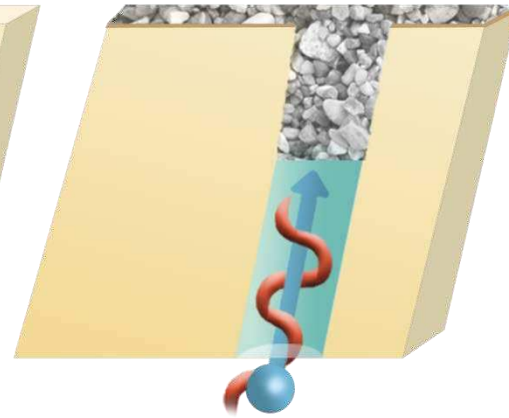
## Super Seal\*

*Blocks tubules with Hydroxyapatite*

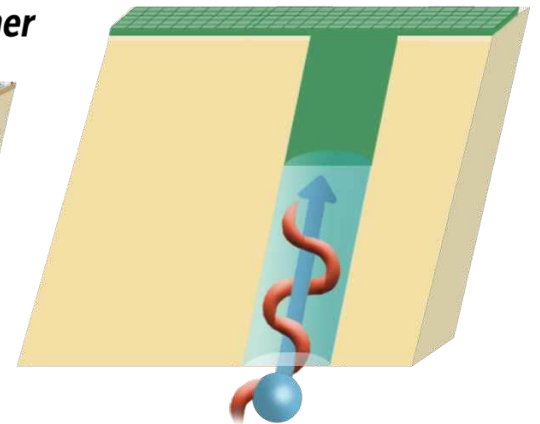


## Vanish XT\*

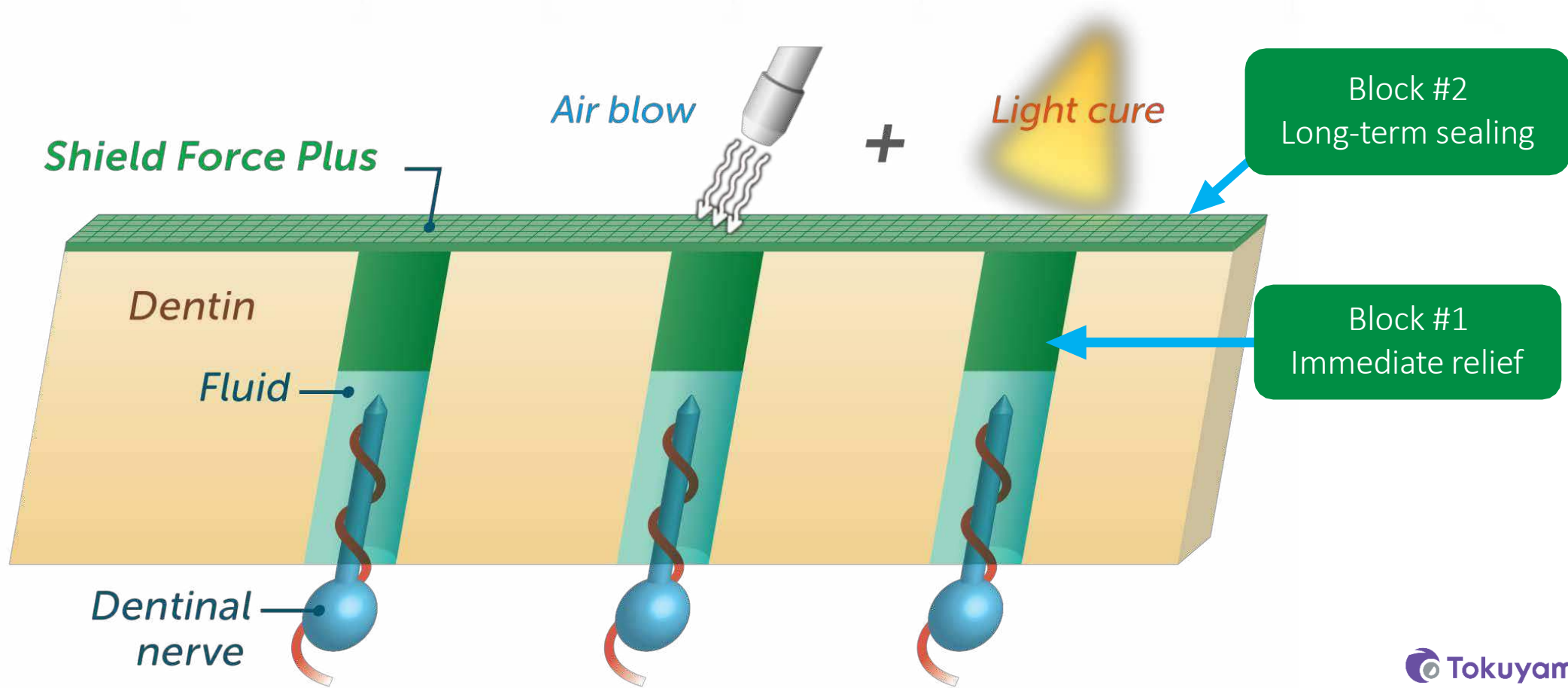
*Blocks tubules with polymerized glass ionomer*



*Penetrates and seals tubules with resin*



# Double Block Technology - 2 Layers of Protection



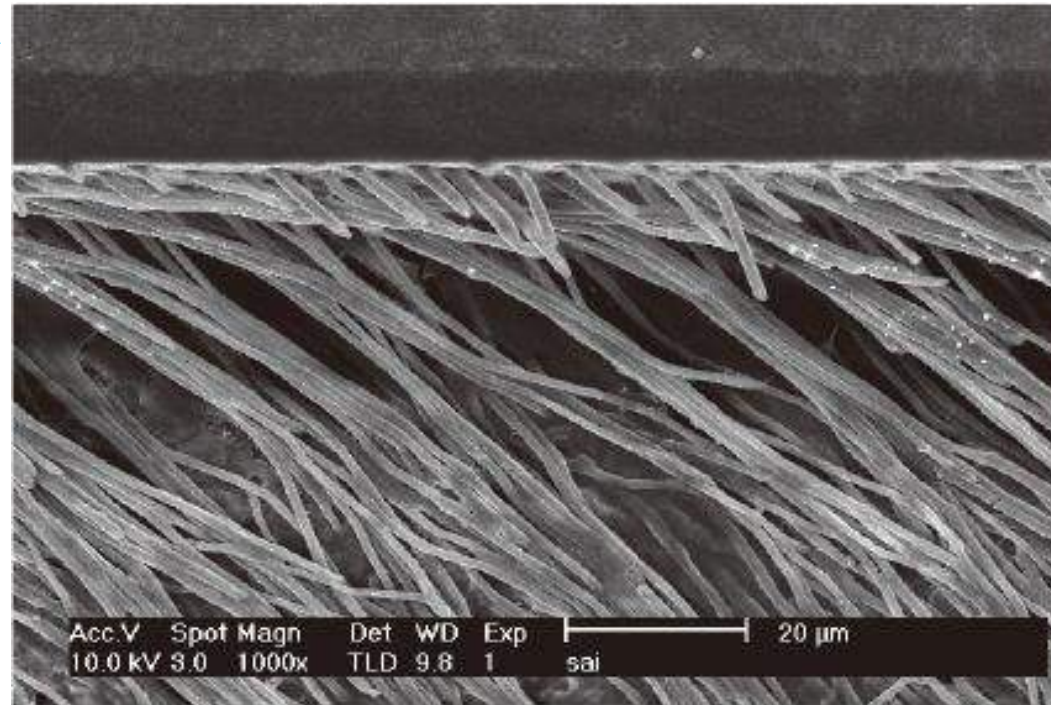
# Block #1 – Immediate Relief

When Shield Force Plus is applied, it seals the dentinal tubules by forming resin tags that penetrate 50µm deep.

Composite Resin →

Shield Force Plus →

Resin Tags →



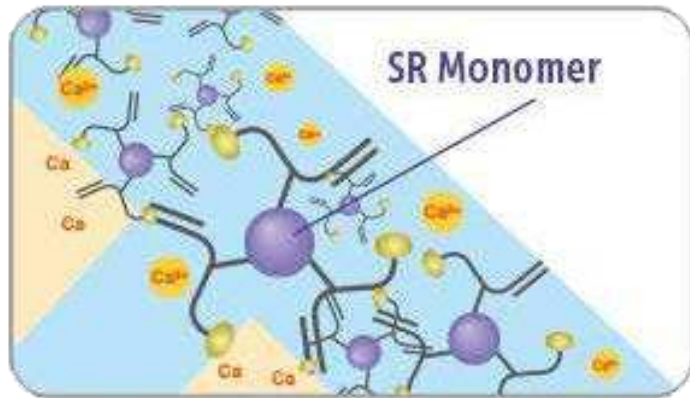
Magnified x1000

\*\* In-house data, R&D, Tokuyama Dental Corporation.

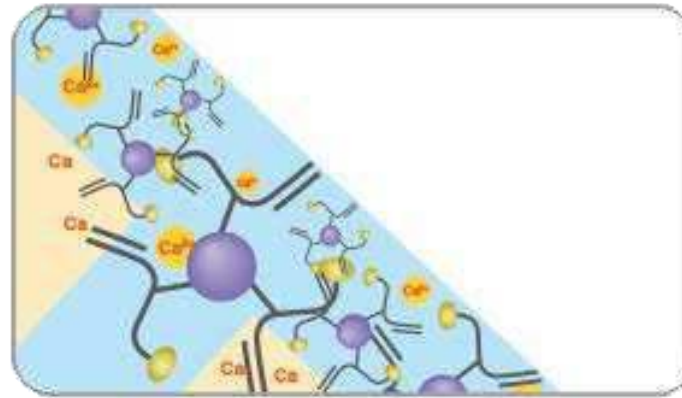
Note: This is a test model demonstrating hypersensitive dentin, using an extracted human tooth ground on the surface to expose the dentinal tubules.

## Block #2 – Long Term Relief

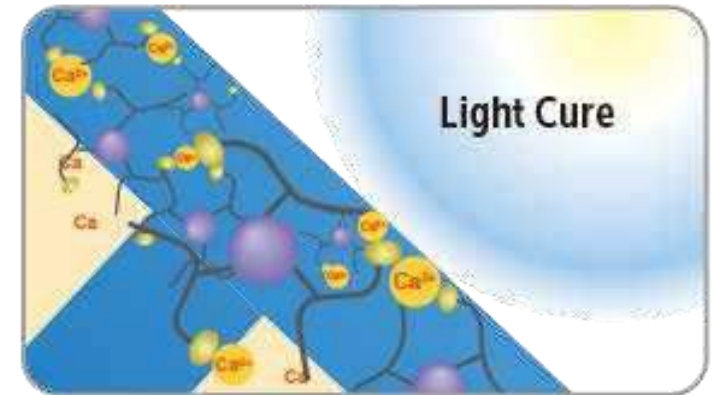
After light-curing, a durable 10µm layer is formed over the resin tags, which protects the dentin from bacteria & abrasion.



Reaction of SR monomer with calcium ions.



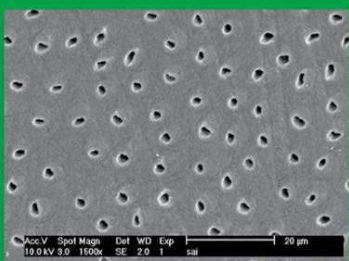
Formation of resin layer, after air drying to remove solvent and water.



Polymerization of resin layer when light cured.

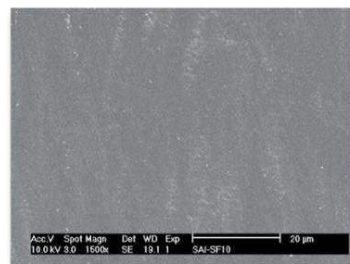
# Superior Long Term Sealing

**Model for  
hypersensitivity**

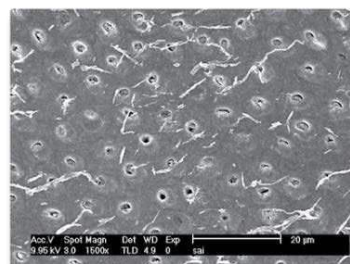


**Initial  
placement**

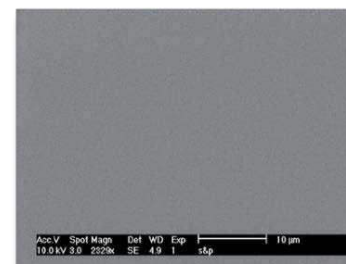
**10,000  
thermal  
cycles  
4°C – 60°C**



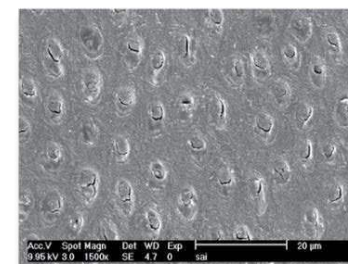
**Shield Force® Plus**



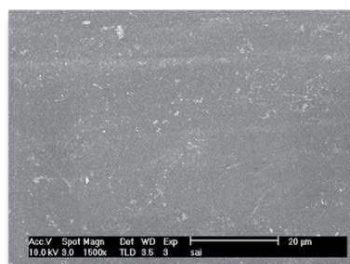
**SuperSeal®**



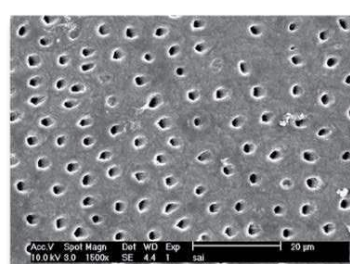
**Seal&Protect®**



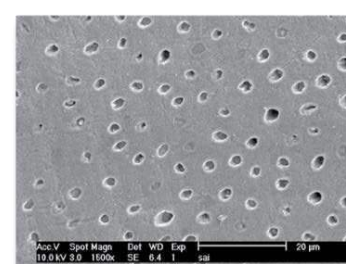
**Gluma® Desensitizer**



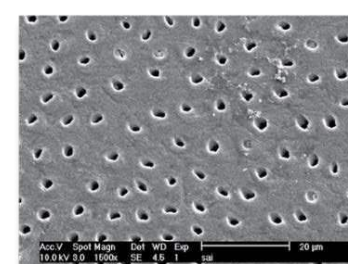
**Shield Force® Plus**



**SuperSeal®\***



**Seal&Protect®\***



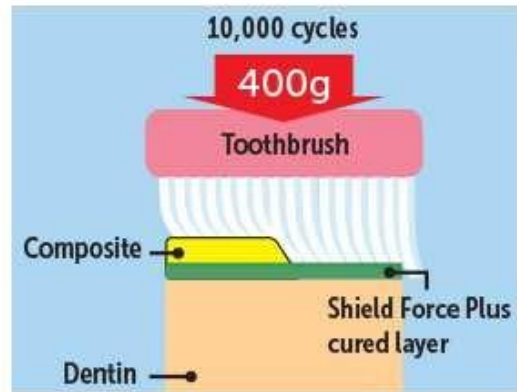
**Gluma® Desensitizer\***

\*Not a registered mark of Tokuyama Dental Corporation.

\*\*In-house data, R&D, Tokuyama Dental Corporation.

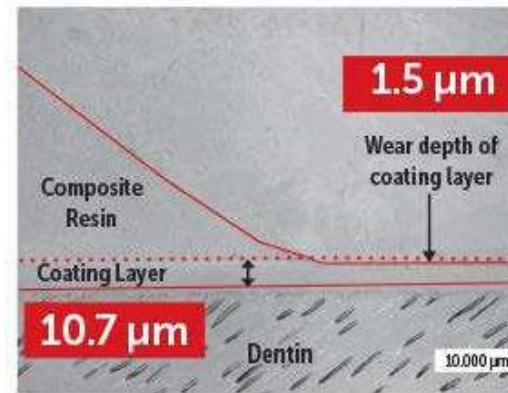
# Higher Wear Resistance – Protects Exposed Dentin

## Toothbrush Abrasion Test



10,000 cycles to simulate brushing 3 times a day for 3 years

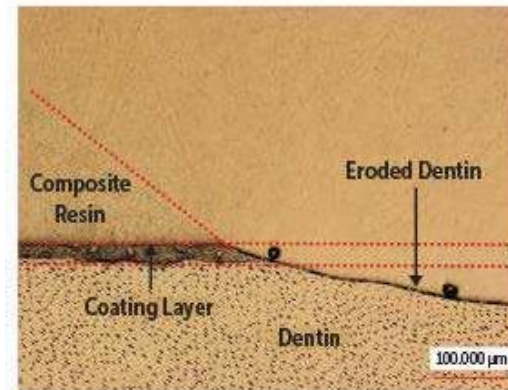
### Shield Force Plus



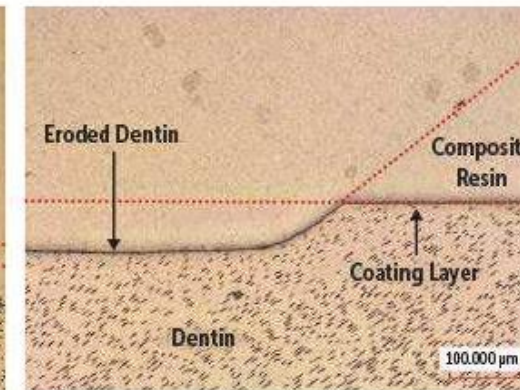
### Seal&Protect\*



### Vanish XT\*



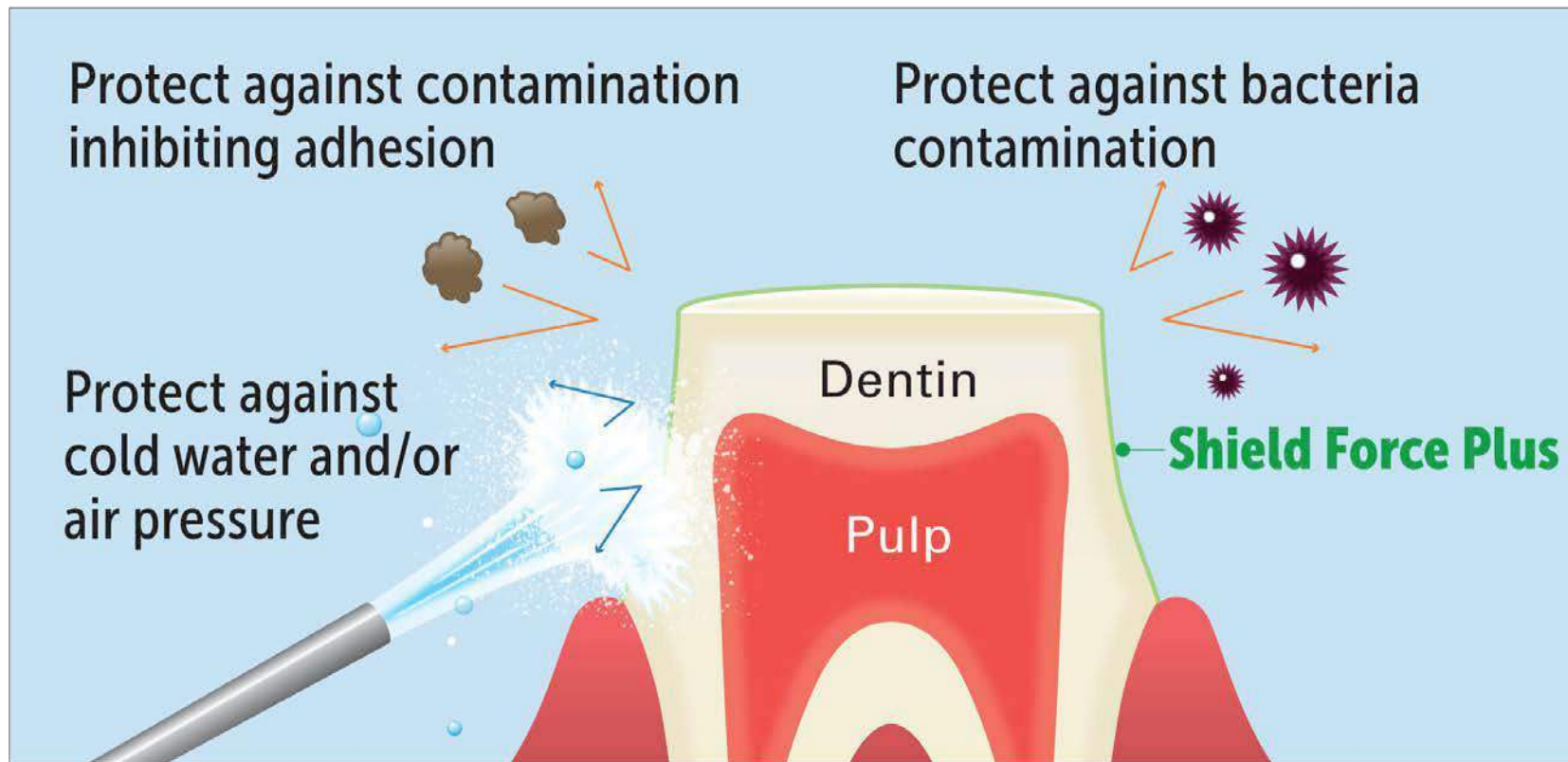
### Gluma\*



\*Not a registered mark of Tokuyama Dental Corporation.

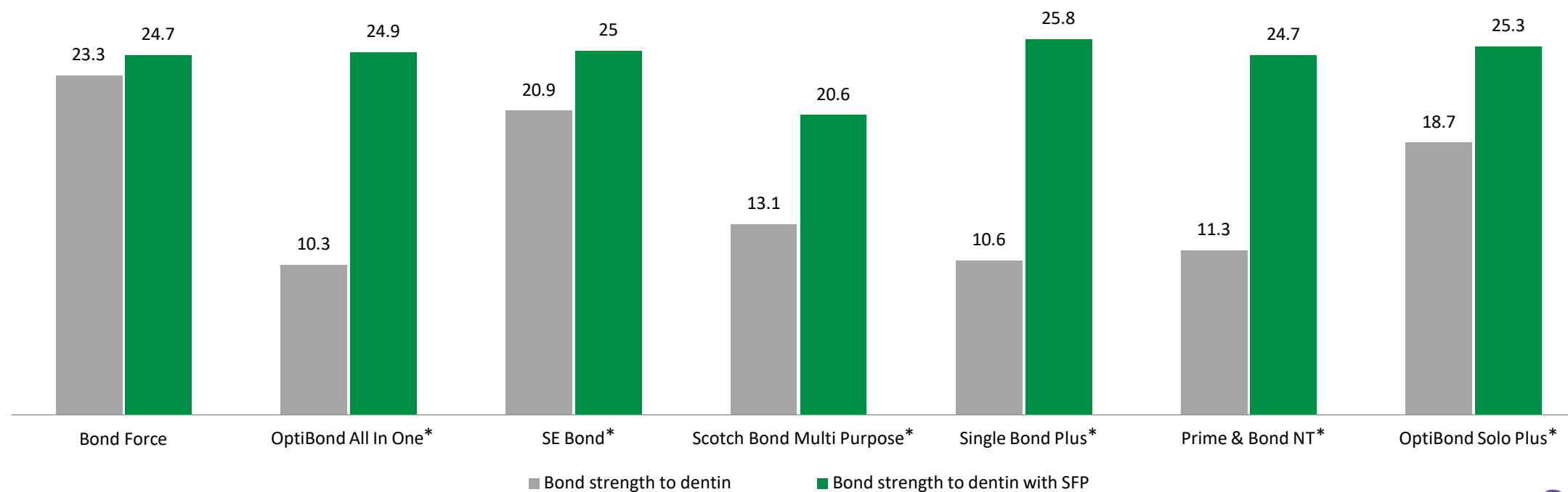
\*\*In-house data, R&D, Tokuyama Dental Corporation.

# Greater Protection



# Improved Bond Strength

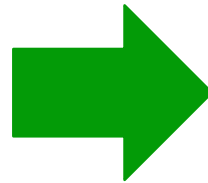
Force Required to Cause Bonding Failure (N)



\*Not a registered mark of Tokuyama Dental Corporation.

\*\*In-house data, R&D, Tokuyama Dental Corporation.

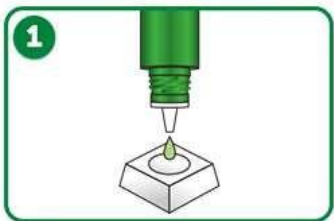
# Glutaraldehyde Free



# Using Shield Force Plus with exposed dentin and direct restorations

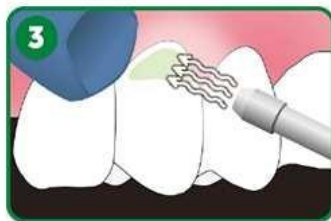
## 1 Exposed Cervical Dentin: Treatment of Dentinal Hypersensitivity

Apply 10 sec



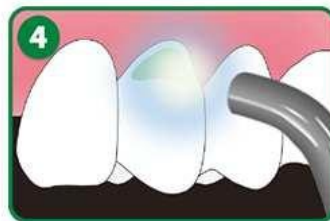
Dispense

Dry 10 sec



Apply weak air for five seconds then strong air for five or more seconds

Cure 10 sec



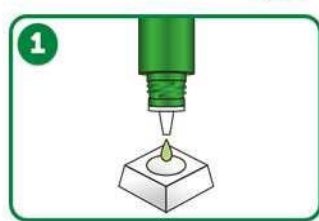
Light cure for 10+ seconds



Apply Shield Force Plus, then leave for 10+ seconds

## 2 Direct Restorations: Sealing of Prepared Tooth to Alleviate/Prevent Tooth Sensitivity

Apply 10 sec



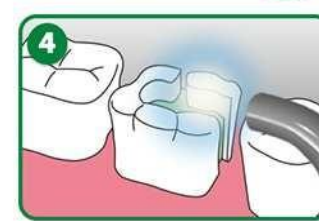
Dispense

Dry 10 sec



Apply weak air for five seconds then strong air for five or more seconds

Cure 10 sec



Light cure for 10+ seconds



Apply Shield Force Plus, then leave for 10+ seconds

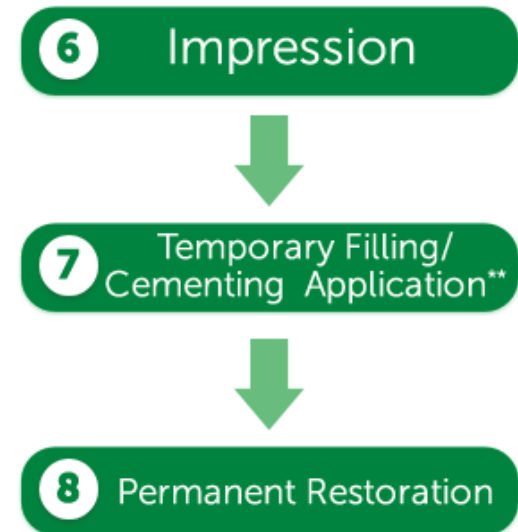
5 Adhesive Treatment\*

6 Composite Resin Filling

\*If using a **total etch bonding system**, etchant must be applied "AFTER" Shield Force Plus procedure.

# Using Shield Force Plus with indirect restorations

## 3 Indirect Restorations: Sealing of Prepared Tooth to Alleviate/Prevent Tooth Sensitivity



\*BEFORE taking impression, it is essential to wipe dentin surface with alcohol, removing unpolymerized layer of Shield Force Plus that could prevent an accurate impression.

\*\*Do **NOT** use temporary resin-based material, it may adhere to the cured Shield Force Plus. The use of water-based cement would be recommended for temporary cementing, and temporary stopping would be recommended for temporary filling.

# Shield Force Plus Versus Other Brands

	SHIELD FORCE PLUS	GLUMA	VANISH XT
Composition	Resin-based	Glutaraldehyde	RMGI-based
Require isolation with dental dam	No	Yes	No
Application time	30 Seconds	30-60 Seconds	20 Seconds
Can be placed under restorations	Yes	Yes	No
Number of Applications	180	220	80-480
Expected Long-Term Pain Relief	3 Years***	18 Months	6 Months
Refill Size	3ml	5ml	10g

\*\*\*Results may vary based on patient diet, proper oral care, and conformance to product directions. Wear data tested in vitro.

# Features and Benefits



Simple 1 time, 30-second procedure, glutaraldehyde free



Sensitivity relief for up to 3 years\*



Immediate sensitivity relief on first application



Applies green, cures clear to ensure accurate placement



Improves bond strength in any restorative procedure

# Product Portfolio



## SHIELD FORCE *PLUS* Kit

- 3mL Bottle
- Disposable Superfine Applicators (x25)
- Dispensing Well

Product Number: 15111



## SHIELD FORCE *PLUS* Refill

- 3mL Bottle

Product Number: 15121

# SHIELD FORCE *PLUS*

A trusted desensitizer that has been proven to provide initial and long-term tooth pain relief for happy patients.





*Innovating Tomorrow's Dentistry, Today™*

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