

DESENSITIZER

Protective sealant for hypersensitive teeth

*Easily sealed –
optimally protected*



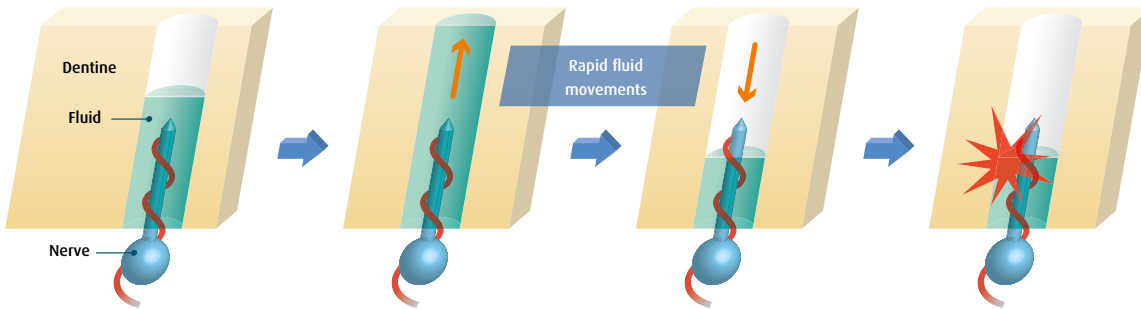
Protective shield for hypersensitive teeth

- ✦ Rapid and effective treatment of hypersensitive dentine
- ✦ Excellent sealing
- ✦ Long-lasting protective layer
- ✦ Easy to use

Just one application - no irrigation, no rubbing in!

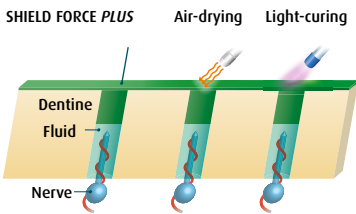
SHIELD FORCE PLUS

Mechanism for causing hypersensitive dentine

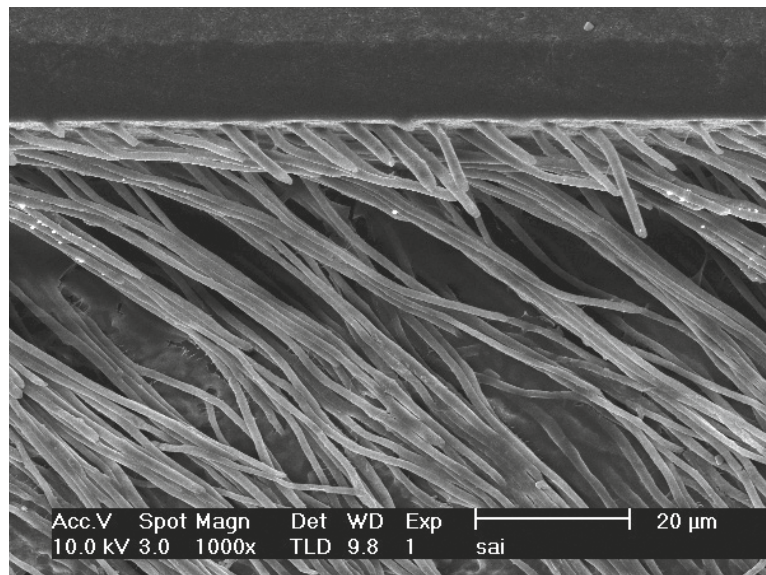


Dentine hypersensitivity is caused by rapid fluid movements in the dentinal tubules.

Sealing the tubules with SHIELD FORCE PLUS



SHIELD FORCE PLUS infiltrates and seals the dentinal tubules, thus preventing pain-inducing hydrostatic pressure in the tubules. In the second step, the layer formed on the tooth surface gets light-cured, so that a double protection mechanism is established. Now there is a long-term protection for up to 3 years.

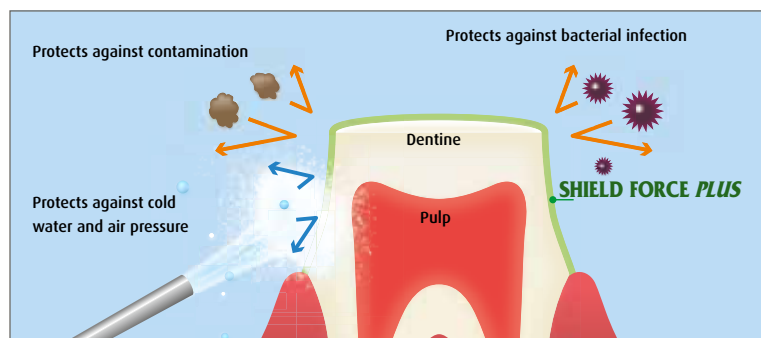


SHIELD FORCE PLUS forms compact resin tags inside the dentinal tubules. (1,000x magnification)

Data: TOKUYAMA DENTAL R&D.

Excellent sealing effect

SHIELD FORCE PLUS relieves tooth hypersensitivity that is induced by cold water or air pressure. SHIELD FORCE PLUS also protects the tooth from accidental bacterial contamination and postoperative sensitivity when used under restorations.



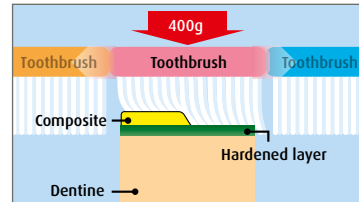
SHIELD FORCE PLUS reduces hypersensitivity immediately using patented TOKUYAMA "Self-Reinforcing Monomer" (SR Monomer)

SHIELD FORCE PLUS

Long-lasting protective layer

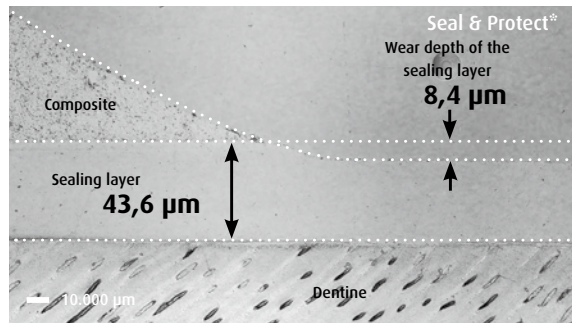
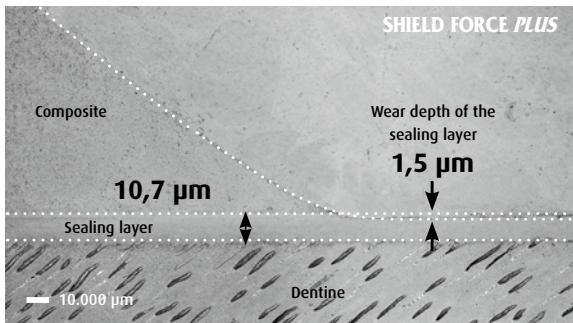
The long-lasting protective layer of SHIELD FORCE PLUS effectively and reliably reduces abrasion and erosion of exposed dentine.

SR Monomer demonstrates exceptional resistance to toothbrush abrasion even though the protective layer is extremely thin.



Test set-up for the abrasion test. 10,000 cycles at a load of 400g.

Toothbrush abrasion test – 10,000 cycles



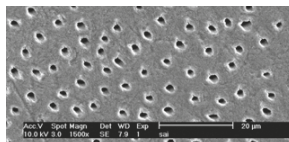
The film thickness of SHIELD FORCE PLUS (TOKUYAMA) is only 10.7µm, as opposed to 43.6µm in the case of Seal & Protect (Dentsply). The amount of wear on SHIELD FORCE PLUS is only 1.5µm, whilst the wear on Seal & Protect is 8.4 µm.

* No own trademark of TOKUYAMA Dental Corp.
** Data: TOKUYAMA DENTAL R&D

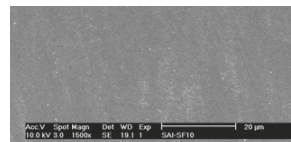
Thermal cycling test (10,000 cycles) at 4°C – 60°C **

SHIELD FORCE PLUS (TOKUYAMA DENTAL)

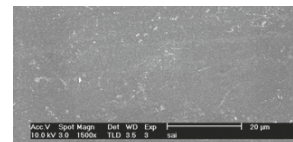
Sealing layer of SHIELD FORCE PLUS remains intact after the thermal cycling test.



Hypersensitive dentine model



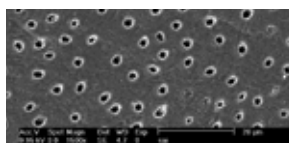
After the application of SHIELD FORCE PLUS



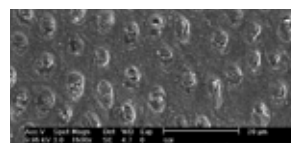
After the thermal cycling test (10,000 x)

Gluma* Desensitizer (Kulzer)

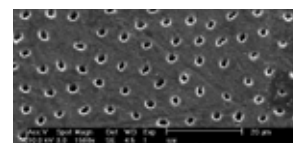
Sealing layer of Gluma* Desensitizer washes out during the thermal cycling test.



Hypersensitive dentine model



After the application of Gluma* Desensitizer



After the thermal cycling test (10,000 x)

* No own trademark of TOKUYAMA Dental Corp.
** Data: TOKUYAMA DENTAL R&D

Expert report: Targeted sealing of exposed dentin surfaces

“Shield Force Plus is a practical, helpful and highly recommended sealant for all direct applications in the dental practice for the preventive, protective, but also situatively necessary treatment of

hypersensitive dentin surfaces exposed by preparation or by other external or idiopathic natural influences.”

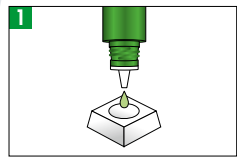


Dr. med. dent. Markus Th. Firla, Hasbergen-Gaste

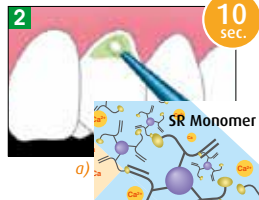
SHIELD FORCE PLUS

Easy Handling One application – no irrigation – no rubbing in

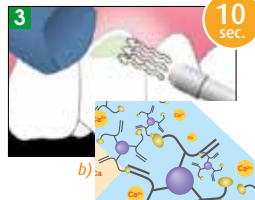
1 Treatment of hypersensitive dentine | protective layer for exposed dentine



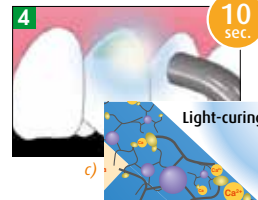
Dispensing



Apply and wait 10 seconds



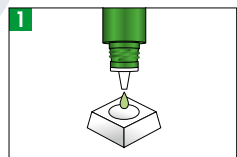
5 seconds of light air-drying and 5 seconds of intensive air-drying



Light-cure for 10 seconds

- a) The monomer interacts with calcium ions and seals the tubules.
- b) A thin protective layer forms on the dentine surface and in the tubules during air-drying.
- c) Then the protective layer is cured by light polymerisation.

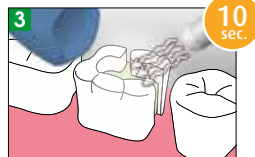
2 Sealing a prepared tooth to relieve sensitivity (direct restoration)



Dispensing



Apply and wait 10 seconds



5 seconds of light air-drying and 5 seconds of intensive air-drying



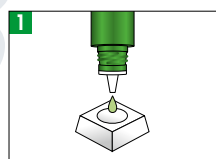
Light-cure for 10 seconds

* If a totaletch system is being used, the etching gel must be applied **AFTER** the application of SHIELD FORCE PLUS.

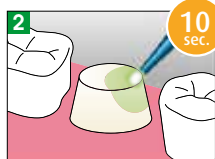
5 Bonding treatment*

6 Composite filling

3 Sealing a prepared tooth to relieve sensitivity (indirect restoration)



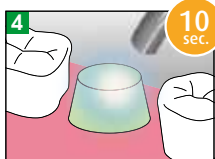
Dispensing



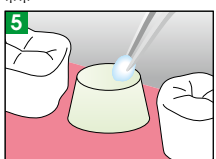
Apply and wait 10 seconds



5 sec. of light air-drying and 5 sec. of intensive air-drying



Light-cure for 10 seconds



Wiping off the inhibition layer with alcohol

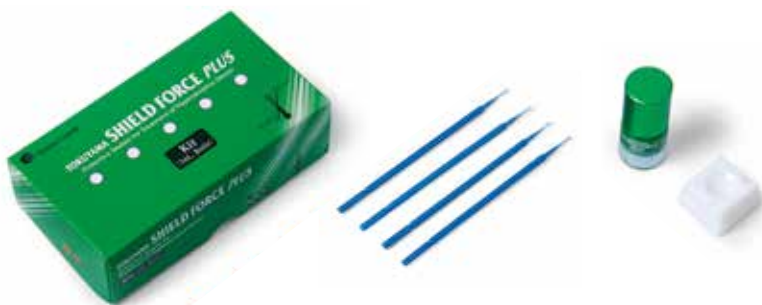
** Before an impression is taken the dentine surface must be cleaned with alcohol to remove the inhibition layer, which can prevent a good impression.

6 Impression taking

7 Temporary filling, cement application***

8 Permanent restoration

*** To cement a temporary restoration, no materials should be used which are resin-based because they are not compatible with SHIELD FORCE PLUS. In conjunction with SHIELDFORCE PLUS you are advised to use eugenol-free cement for temporary cementation and also for provisional fillings.



SHIELD FORCE PLUS

COMPLETE KIT

Bottle 3ml
Microbrush, 25 pcs.
Mixing dish

REFILL

Bottle 3ml

Manufacturer



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