

SIGNIFICANTLY HARDENS WEAKENED ENAMEL



# THE NEW POWER FOR ENAMEL HARDENING

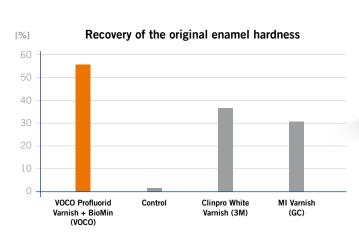
Whether for the treatment of hypersensitive teeth and sensitive root surfaces or after professional tooth cleaning - when it comes to gentle fluoridation, VOCO Profluorid Varnish is an indispensable part of any dental practice. The varnish, which has been used millions of times, ensures comprehensive and long-lasting desensitisation of sensitive teeth. Further advantage are the seven attractive flavours and the different dosage forms. But we thought there was more to it! The result is VOCO Profluorid Varnish + BioMin, which contains bioglass that releases calcium and phosphate ions to support tooth remineralisation – for double the protection!

### VOCO Profluorid Varnish + BioMin - what's new?

VOCO Profluorid Varnish + BioMin is based on our desensitising fluoride varnish VOCO Profluorid Varnish, which has been around for years and is tried and tested. New to the "+ BioMin version" is the addition of the soluble bioglass from BioMin Technologies Ltd. The BioMin bioglass was researched and developed in collaboration with Professor Robert Hill at the Queen Mary University in London.

The invisible and flavourless bioglass is already used with great success in other prophylaxis products, such as toothpaste. However, it is being used in a fluoride varnish for the first time. BioMin dissolves in the presence of saliva and releases large amounts of calcium and phosphate ions. Both of these ion types support the remineralisation of the tooth. In combination with the fluoride from the varnish, crystalline structures form on the tooth surface, which significantly harden acid-weakened

enamel, for example. VOCO Profluorid Varnish + BioMin thus offers patients double protection: on top of the crystalline protective layer described, VOCO Profluorid Varnish + BioMin also possesses the properties of a comprehensive and long-lasting desensitisation of sensitive teeth thanks to the fluoride it contains. The special aspect – VOCO Profluorid Varnish + BioMin achieves by far the best results in hardening weakened enamel of all the materials tested.



Hardness increase of the enamel in percent after acid attack using calcium and phosphate-containing fluoride materials

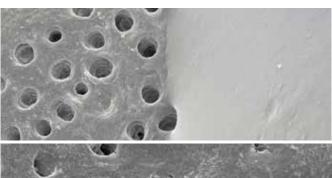
Source: Emily Thambi (BDS, MSc.), Queen Mary University, London

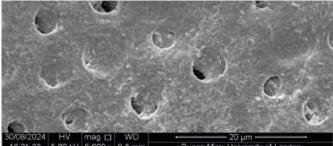


# PROTECTION IN VOCO QUALITY

### Reliable desensitisation – as you have come to expect

Just like our established varnish, VOCO Profluorid Varnish + BioMin has a 5 % sodium fluoride concentration (≜ 22,600 ppm fluoride). The usual effectiveness of the desensitisation is thus also guaranteed with the new version. Measurements from Emily Thambi, dentist and research associate at the Queen Mary University of London, show that VOCO Profluorid Varnish + BioMin seals the majority of open dentinal tubules safely and long-lastingly.





SEM images of the dentin before and after the application of VOCO Profluorid Varnish + BioMin

top left: non-treated dentin

top right: application of VOCO Profluorid Varnish + BioMin

bottom: dentin after application of VOCO Profluorid Varnish + BioMin

Source: Emily Thambi (BDS, MSc.), Queen Mary University, London

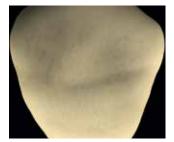
# Open dentinal tubules 30 25 20 15 10 before application after application

Number of open dentinal tubules per mm² before and after application with VOCO Profluorid Varnish + BioMin

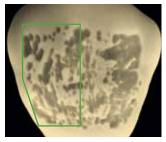
Source: Emily Thambi (BDS, MSc.), Queen Mary University, London

## Protection against demineralisation

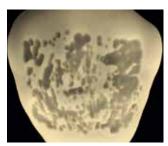
In addition to the measurements on tubule closure and enamel hardening, protection against demineralisation was also investigated. As the following graphics show, VOCO Profluorid Varnish + BioMin effectively protects against further acid attacks. A tooth was demineralised twice for a period of 2 days each time at a pH level of 4.5, with one half of the tooth being treated with VOCO Profluorid Varnish + BioMin between the first and second demineralisation. The results clearly show that the side treated with VOCO Profluorid Varnish + BioMin shows practically no further demineralisation, while the untreated side has changed significantly.



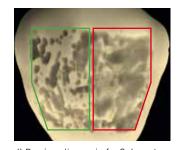
a) Initial situation



 c) Half-sided application of VOCO Profluorid Varnish + BioMin.
 Dwell time 1 day



b) Demineralise for 2 days at pH 4.5



d) Demineralise again for 2 days at pH 4.5
left: treated with VOCO Profluorid Varnish + BioMin right: non-treated

Source: Emily Thambi (BDS, MSc.), Queen Mary University, London

# TUBE OR SINGLEDOSE - THE CHOICE IS YOURS

### **Indications**

Treatment of hypersensitive teeth

Treatment of sensitive root surfaces

Support of remineralisation



# **Advantages**

- Significantly hardens weakened enamel
- Reliable desensitisation thanks to 5 % NaF (\$\triangle\$ 22.600 ppm fluoride)
- Aesthetic, tooth-coloured varnish
- Available in four flavours: mint, cherry, caramel and bubble gum
- Ideal for treating cervical areas after professional cleaning and calculus removal
- Can also be used for MIH patients
- Applied in a thin layer and thus economical



### **Presentation**

	SingleDose	SingleDose	SingleDose	Tube
Flavour	$48 \times 0.40 \text{ ml}$	$50 \times 0.40 \text{ ml}$	$200 \times 0.40 \text{ ml}$	10 ml
Caramel	_	REF 2270	REF 2276	REF 2266
Cherry	_	REF 2271	REF 2277	REF 2267
Mint	_	REF 2272	REF 2278	REF 2268
Bubble gum	_	REF 2273	REF 2279	REF 2269
Mixed	REF 2274	_	_	_

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