

Stains

## Material report visio.lign shield & visio.lign color



colour natural beauty

powered by visio.lign

## visio.lign shield Gloss and protection

The new visio.lign shield gloss varnish for composite, PMMA and BioHPP allows you to create optimal surface gloss and protection. A surface finished with visio.lign shield gloss varnish acts as an abrasion-resistant protective shield that won't discolour. An optimal result is achieved, especially on hard-to-reach surfaces such as the interdental area as visio.lign shield is available in two viscosity variants – fluid "LV" and viscous "HV" – to give every user maximum flexibility. It takes just a few work steps to achieve a top-class surface gloss. This saves users valuable time compared to the conventional polishing process.

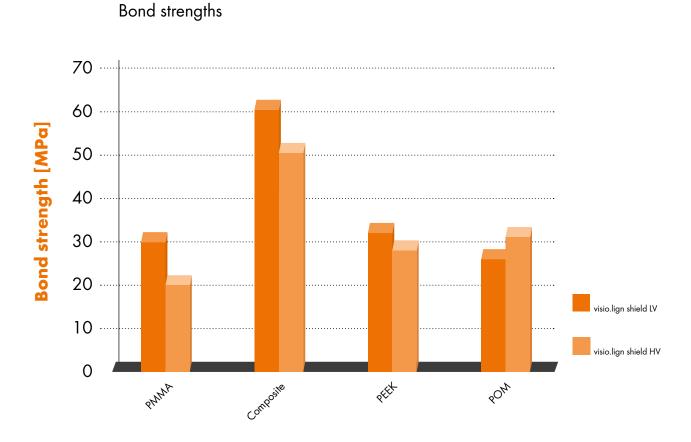




HV - High Viscosity (thick) EEE VLSHIELDHV5 5 ml

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## **visio.lign shield** 1. Adhesive bond

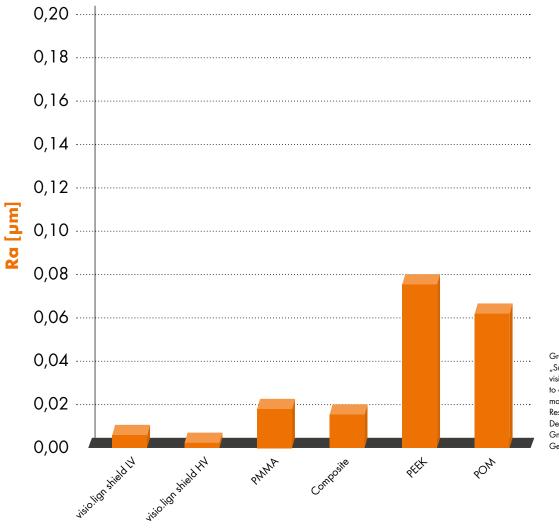


Graph showing "Bond strengths": Bond strength test as per EN ISO 10477, Internal Research, Chemical Development bredent GmbH & Co. KG, Senden, Germany, 2023

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# visio.lign shield2. Surface roughness

Surface roughness of visio.lign shield compared to conventionally polished materials

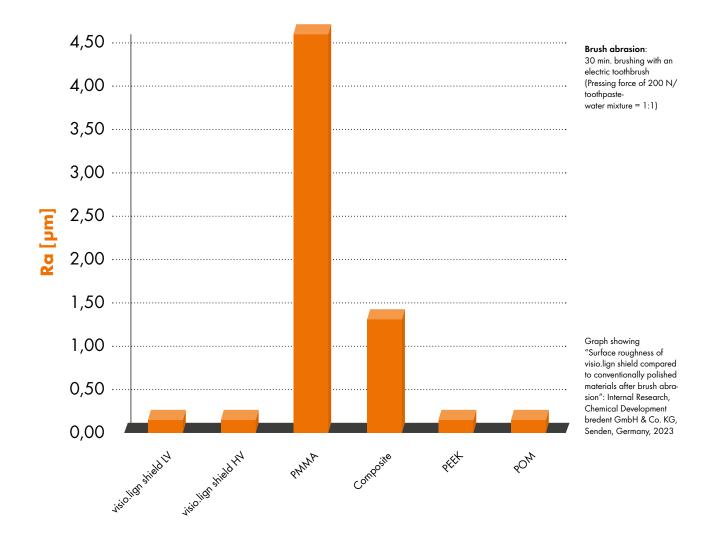


Graph showing "Surface roughness of visio.lign shield compared to conventionally polished materials": Internal Research, Chemical Development bredent GmbH & Co. KG, Senden, Germany, 2023

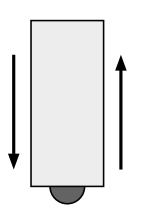
#### Surface roughness before/after brush abrasion

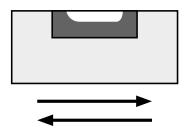
visio.lign shield exhibits a lower surface roughness than conventionally polished materials such as PMMA, composite, PEEK and POM. visio.lign shield has a higher brush abrasion resistance compared to non-varnished materials.

## Surface roughness of visio.lign shield compared to conventionally polished materials **after brush abrasion**



## Regensburg University Hospital 3. POB wear test in a chewing simulator





Test set-up: Pin-on-block wear test at RegensburgUniversity Hospital\*

Antagonist: steatite ball Vertical lifting movement: 1 mm (50 N/1.2 Hz, 120,000 cycles) Lateral movement: 1 mm Dest. water: 25 °C

No significant differences were observed between varnished and non-varnished crea. lign with regard to the mean and maximum wear depth.

No splitting, chipping or similar was observed with visio.lign shield.

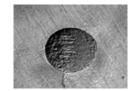
#### 3D laser scanning microscope images:



crea.lign, non-varnished



crea.lign, varnished with visio.lign shield LV



crea.lign, varnished with visio.lign shield HV

\* Source: Test report for the pin-on-block wear test, UKR Regensburg University Hospital, Outpatient Department for Dental Prosthetics, 2023 April

## **visio.lign shield** Need to know



#### Tendency to discolour and colour stability

visio.lign shield shows a slight tendency to discolour with substances which stain such as coffee, tea or red wine. The colours in the **visio.lign color** range exhibit high colour stability under irradiation.

To ensure optimum colour stability in the varnished restoration, the instructions for use recommend refraining from consuming beverages which stain during the first 24 hours after insertion.

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#### Why does visio.lign shield not crack unlike competitors? Does it contain a different acrylate?

visio.lign shield features a special polyfunctional (meth-)acrylate matrix designed for stress crack minimisation and abrasion resistance.



### Biocompatibility

Unlike the diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide (TPO) commonly used in dental applications, the photoinitiator used in visio.lign shield is not classified as toxic to reproduction. The yellowing of the liquid associated with the use of the initiator disappears due to its complete transformation during light curing.



Material Report

visio.lign shield & visio.lign color



**visio.lign** The Aesthetic and Functional System







0091153GB-20230925 Mistake and subject to change reserved

