

SCIENTIFIC REPORT

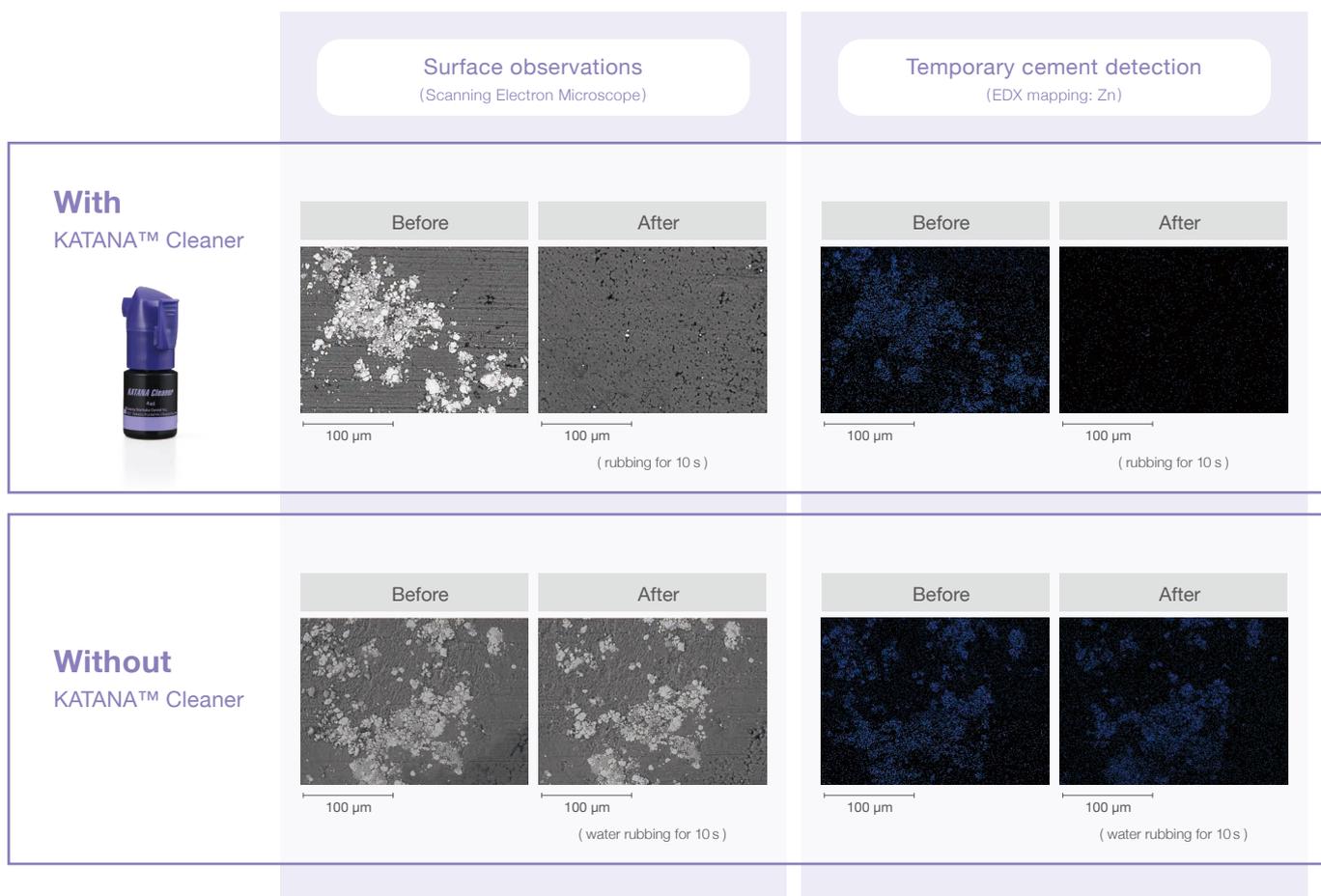


KATANA™ Cleaner

Effectiveness of temporary cement removal with KATANA™ Cleaner

Cleaning the Residues & Optimizing your Cementations

After the removal of the temporary crown before cementing a restoration, traditional cleaning methods of the abutment may not be enough for removing residual temporary cement which will reduce the bond strength. KATANA™ Cleaner has a high cleaning effect due to the surface active characteristic of MDP Salt, which is formed from the phosphate monomer "MDP" and an alkaline compound. It is a simple way to optimize your cementation procedures and recover the bond strength.



Test conditions

Adhesion surface treatment: 1) Polishing #1000 bovine teeth, 2) Temporary Crown (acrylic self-curing resin) was cemented with temporary cement (zinc polycarboxylate cement), 3) Stored at 37°C and 95% RH for 1 week, 4) Temporary Crown was removed and the temporary cement was removed with an ultrasonic scaler, 5) Rubbing with KATANA™ Cleaner for 10 s (upper images)/Water rubbing for 10 s (lower images).

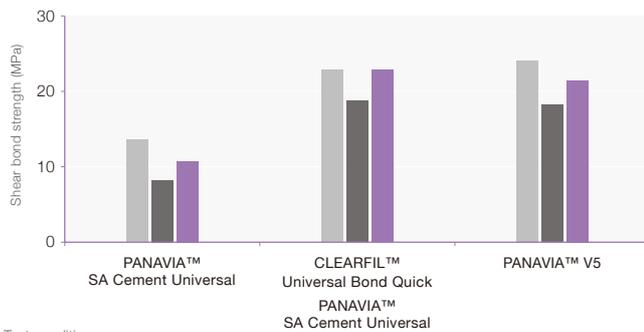
Improving the Bond Strength

As shown on the graphs below, removal of the residual cement either with an ultrasonic scaler or pumice paste & prophylaxis cup may not be enough. After cleaning with KATANA™ Cleaner, its high cleaning effectiveness contributes for an optimized bonding surface.

Temporary cement removed with:

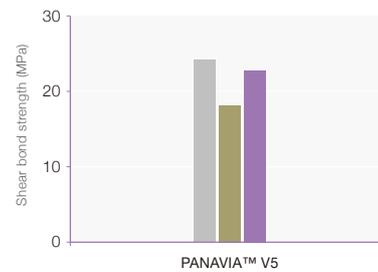
Ultrasonic scaler

- No contamination
- After removing the temporary cement (polycarboxylate type) with an ultrasonic scaler
- After removing the temporary cement (polycarboxylate type) with ultrasonic scaler and treatment with KATANA Cleaner



Pumice paste and prophylaxis cup

- No contamination
- After removing the temporary cement (resin-based type) with prophylaxis paste & cup
- After attaching the temporary cement (resin-based type), removal with prophylaxis paste & cup, and treatment with KATANA Cleaner

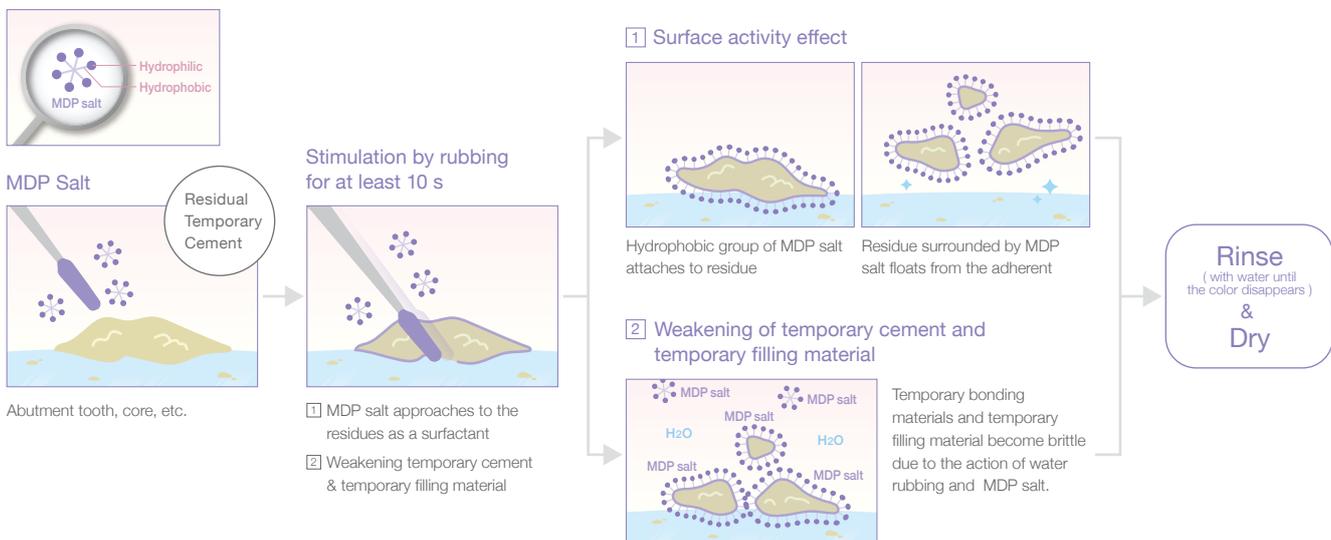


Test conditions

Adhesion surface treatment: 1) Polishing #1000 human teeth, 2) Temporary Crown (acrylic self-curing resin) was cemented with temporary cement (polycarboxylate type, resin-based), 3) Stored at 37°C 95% RH for 1 week, 4) Temporary Crown was removed and the temporary cement was removed with an ultrasonic scaler or pumice paste and prophylaxis cup at low revolution (5000 rpm, 10 s), 5) Cleaning with KATANA™ Cleaner.
Bonding strength measurement: 1) SUS chip (3mmΦ) was bonded by each bonding operation (PANAVIA™ SA Cement Universal, CLEARFIL™ Universal Bond Quick/PANAVIA™ SA Cement Universal, PANAVIA™ V5), 2) Measured after storage in water at 37°C for 1 day.

Source: Kuraray Noritake Dental Inc.

How it Works - schematic illustration -



Conclusion

Appropriate cleaning of the residual temporary cement before cementing a restoration is crucial for adequate cementation. KATANA™ Cleaner's high cleaning effect removes contamination to optimize your cementation procedures.

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- Before using this product, be sure to read the Instructions for Use supplied with the product.
- The specifications and appearance of the product are subject to change without notice.
- Printed color can be slightly different from actual color.

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