

# Zirconia Bonding With

**PANAVIA™ V5**  
ADHESIVE RESIN CEMENT SYSTEM



Retention of zirconia-based ceramic restorations depends on mechanical roughening of the surface through sandblasting and chemical bonding with adhesive monomer in special primers.



## MDP Monomer Originally from Kuraray Noritake Dental

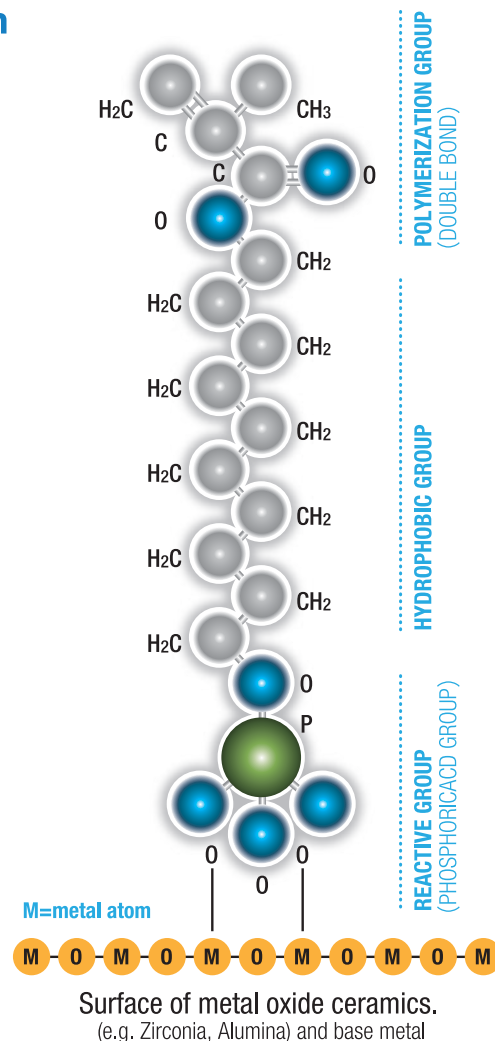
An adhesive phosphate monomer such as MDP shows an excellent chemical bonding to zirconia-based ceramics. The phosphate ester group of the MDP monomer results in chemical bonding to metal oxides, zirconia-based ceramics and other ceramics.

PANAVIA™ V5 includes the original MDP adhesive monomer, which has exceptional bond strength based on research gathered over 15 years.

It is designed to have excellent bond strength and durability to zirconia.

“...regardless of the conditioning methods, MDP-monomer based cements presented the most favorable values compared to those of other resin cements.”

Systematic Review of Adhesion Studies on Zirconia  
M. Özcan, J Dent Res Vol #90 A: 374, 2011 [www.iadr.org](http://www.iadr.org)



## ✓ Excellent Stability, Great Handling, Virtually All Bonded Restorations

- Chemical Bonding to **Zirconia** With Exceptional Bond Strength.
- Excellent dentin bonding similar to gold standard adhesive.
- Durable Bond, Touch-cure.



One component **Tooth Primer** for tooth structure, Intra-oral composite resins or Metals.



One component **CLEARFIL™ CERAMIC PRIMER PLUS** for virtually all prosthetics.

## ✓ Amine-Free\* Color Stability

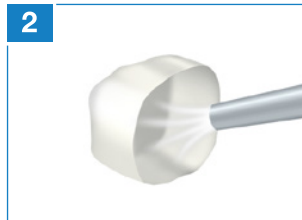
Color stability, 5 Esthetic shade choices.

\*Amine related to self-curing process.

### Basic Procedure for Zirconia Restorations with PANAIA™ V5



**1**  
Clean and dry the tooth surface, and then trial fit the zirconia restoration.



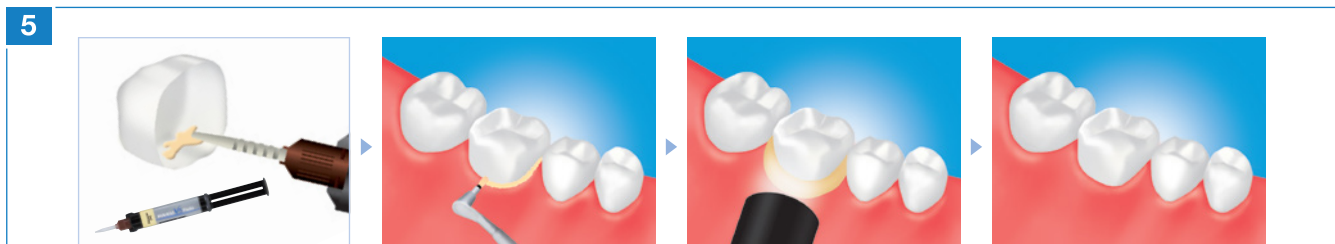
**2**  
Blast with alumina powder (30-50µm, 0.1-0.4MPa/14-58 PSI/1-4kgf/cm²), then ultrasonic clean and dry.



**3**  
Apply CLEARFIL™ CERAMIC PRIMER PLUS and dry.



**4**  
Apply TOOTH PRIMER, leave for 20 seconds and dry.



**5**  
Apply PANAIA™ V5 paste, remove excess cement, light-cure for 10 seconds. Tack-curing method is also possible: Light-cure for 3-5 seconds and remove excess cement with a dental explorer. Maintain isolation for 3 minutes.



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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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