

# ACTIVA™ BioACTIVE-CEMENT™

*Inspired by Nature*

**PULPDENT®**



## The BioACTIVE CONNECTION - Natural Lute, Bond & Seal

### ACTIVA is Different

Bioactivity stimulates mineral apatite crystal formation that penetrates and fills micro-gaps, knits the restoration and the tooth together, guards against recurrent caries, and seals margins against microleakage and failure – nature's way.

### APATITE FORMATION SEALS AND PROTECTS TEETH

ACTIVA stimulates the natural remineralization process. Apatite crystals continuously form ionic bonds that connect the restoration to the tooth, fill micro-gaps, and seal margins at the restorative-tooth interface, defining a new standard of care.

### ABSORBS SHOCK AND STRESS

ACTIVA's patented rubberized-resin provides greater resistance to chipping and fracture than any other dental cement.

### CAD/CAM ADVANTAGE

ACTIVA BioACTIVE-CEMENT forms strong bonds to zirconia, ceramic, lithium disilicate, and metal. Ideal for CAD/CAM and implant dentistry. Tissue compatible.

### FAST AND EASY TO USE

No etching. No bonding. Dual cure. Tack cure for easy removal of excess.

### DURABLE AND INSOLUBLE

ACTIVA's bioactive resin matrix does not wash out or crumble. It is moisture friendly and ideal for the moist oral environment.

### RESPONDS TO pH CHANGES

ACTIVA is a dynamic material with continuous release and recharge of calcium, phosphate and fluoride for long-term benefits.

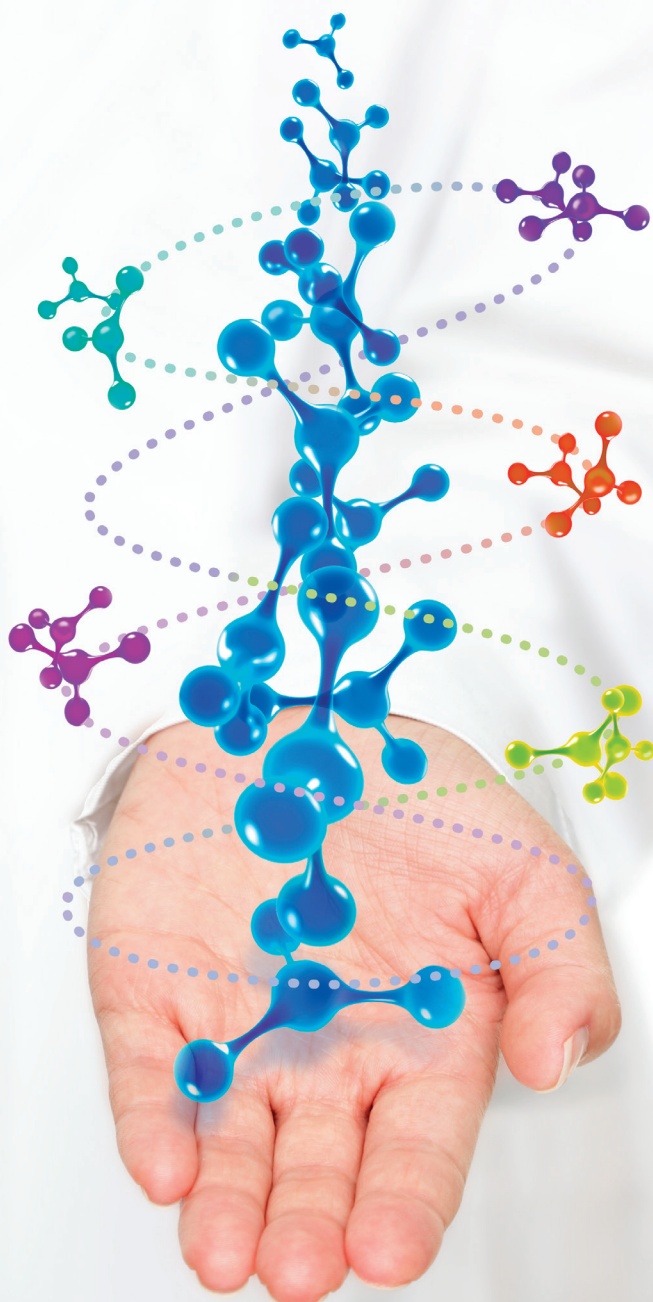
### NO BISPHENOL A

ACTIVA is safe for all your patients. It contains no Bisphenol A, no Bis-GMA and no BPA derivatives.

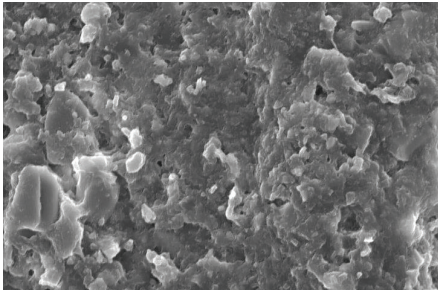
### ACTIVA™ BioACTIVE-CEMENT™

**SINGLE PACK:** 5mL/7gm syringe + 20 automix tips  
(15 straight black + 5 with bendable metal cannula)  
VC1A2 A2 Opaque  
VC1T Translucent

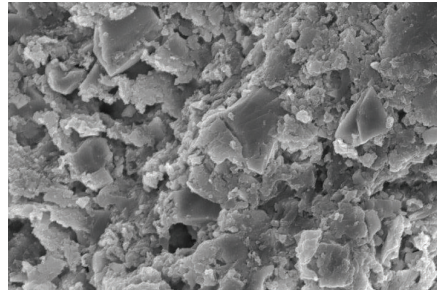
**VALUE PACK:** 2 x 5mL/7gm syringes + 40 automix tips  
(30 straight black + 10 with bendable metal cannula)  
VC2A2 A2 Opaque  
VC2T Translucent



## Mineral Apatite Formation SEM Analysis of ACTIVA™ BioACTIVE-CEMENT™ Surface after 21 Days in Saline



**Fig 1** ACTIVA BioACTIVE-CEMENT Control, no saline 3000x



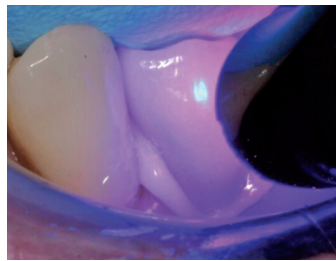
**Fig 2** ACTIVA BioACTIVE-CEMENT 21 days in saline 3000x

Compared to the no saline control, scanning electron microscope (SEM) imaging and energy-dispersive X-ray spectroscopy (EDS) after 21 days in saline shows significant increase in calcium and phosphorus ion concentrations, and decrease in carbon and silica ions, indicating that mineral apatite deposits are forming on the surface.

## A simple cementation procedure: self-adhesive, syringe delivery, no trituration, easy clean up



**1** Tooth is prepared to receive a crown. Note retentive crown prep.



**2** Crown filled with ACTIVA BioACTIVE-CEMENT is seated and tack cured 1-2 seconds.



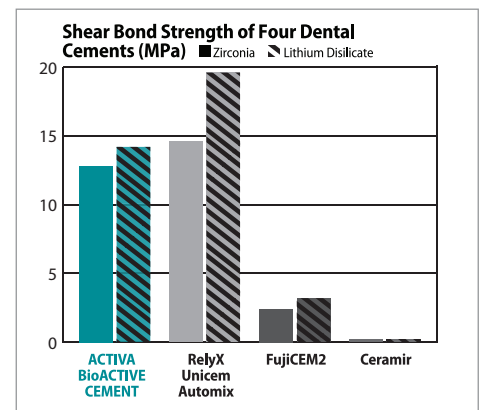
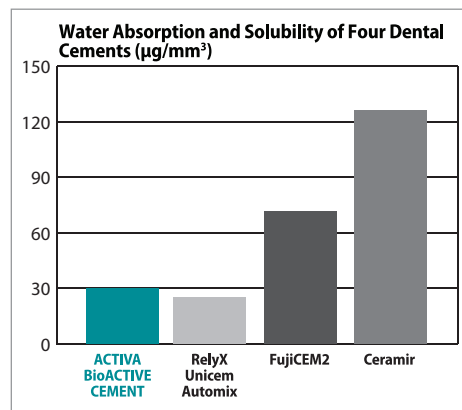
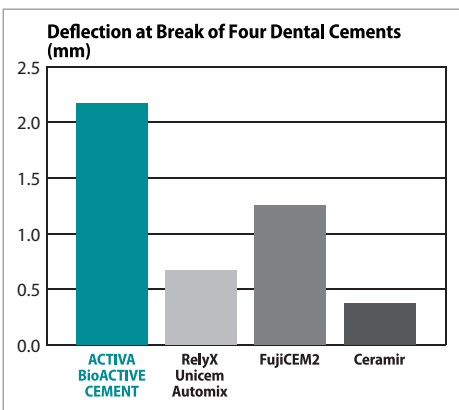
**3** Excess cement is easily removed



**4** Shows finished case

*Photos courtesy of Dr. G. Franklin Shull*

## Physical Properties of ACTIVA™ BioACTIVE-CEMENT™ Compare Favorably with Leading Cements



ACTIVA = Bioactive Cement; RelyX Unicem Automix = Self-adhesive Cement; FujiCEM2 = RMGI; Ceramir = Calcium Aluminate-GI

Source: University Testing

RelyX, FujiCEM and Ceramir are trademarks of 3M ESPE, GC and Doxa respectively

Contact PULPDENT or your local PULPDENT sales representative about ACTIVA today!