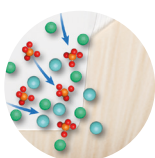


ACTIVA™ BioACTIVE Bulk Flow™

PULPDENT®

Next-gen, Self-leveling
Bioactive Bulk Fill



Natural Remineralization
Support¹



One-step², Dual-cure
Ease & Efficiency



Universal Shade

Introducing a Better Bulk Fill



Designed for Efficiency
& Patient Care

- One-step placement²
- Self-leveling
- Natural remineralization support¹
- Microleakage resistance
- Unlimited depth-of-cure³
- Universal and Pediatric shades

SMART™ Technologies, Everyday Versatility

ACTIVA BioACTIVE Bulk Flow is a next-generation solution for everyday bulk filling. Patented SMART™ technologies optimize patient care, increase clinical efficiency, and overcome the limitations of existing materials:



Responds to pH cycles by releasing and recharging fluoride, calcium, and phosphate. Ionic activity supports biofilm modulation,⁴ natural remineralization,¹ and mineral apatite formation to defend against recurrent decay and secondary caries.⁵



Moisture-tolerant acidic functional monomer reduces technique sensitivity in a moist field.



Elastomeric functional monomer resists shrinkage stress and fracturing.

The Ultimate Class II Solution



Dentin replacement



One-step bulk fill²

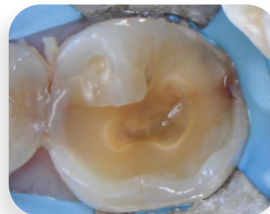
Self-leveling Flow, Two Ways to Bulk Fill

Use as a dentin replacement or bulk fill in one step.²

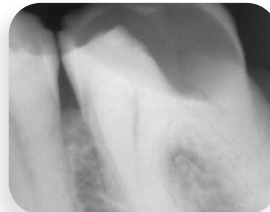
Large Class II, Direct Onlay

In this case, the patient presented with secondary decay on the first molar due to restorative failure. ACTIVA BioACTIVE Bulk Flow was used to restore the tooth as the patient could not afford a crown.

Before



After



Images courtesy of Dr. Raymond Zhu

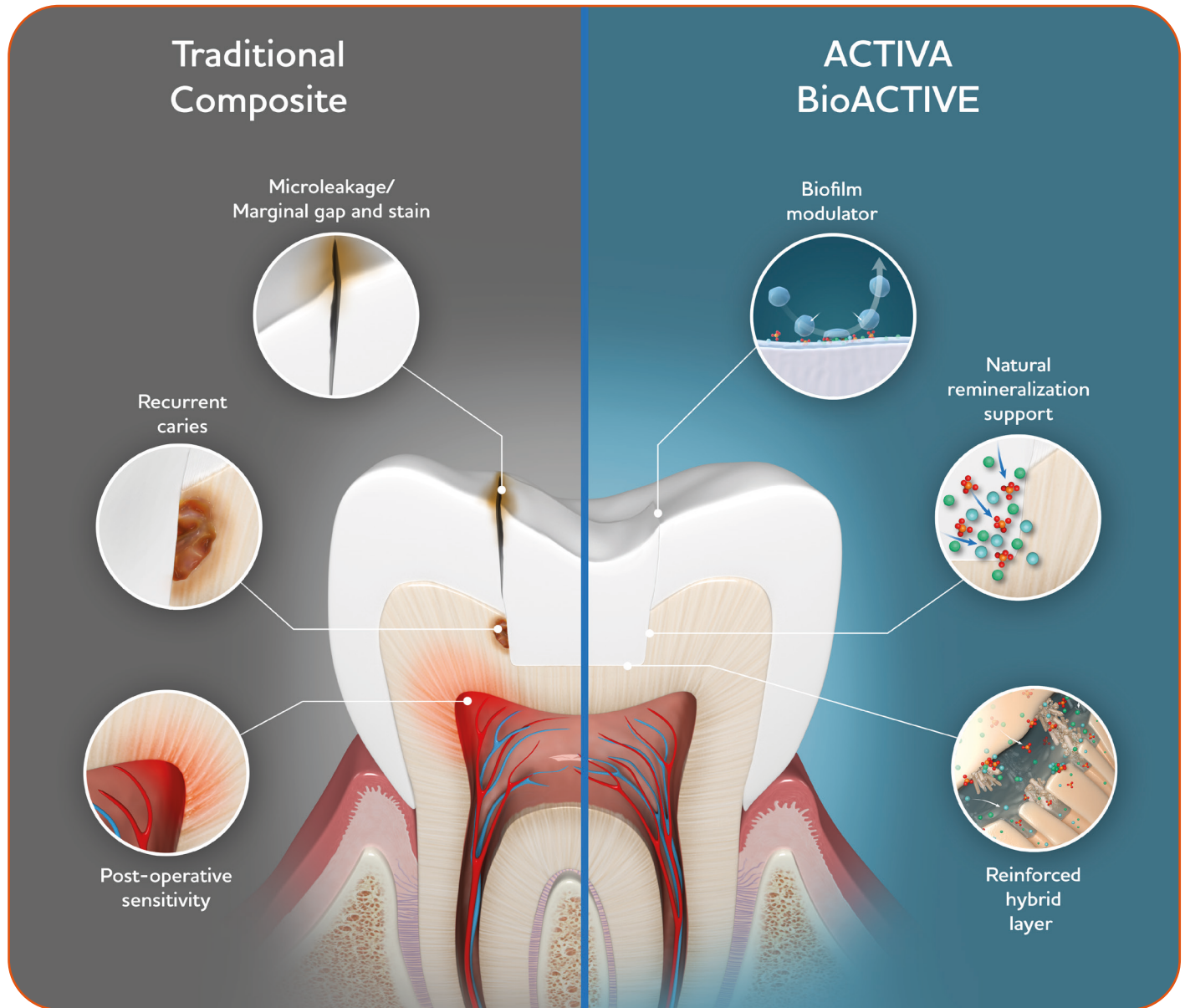


Video Demo: Class II Bulk Fill Restoration, Presented by Dr. Nate Lawson



Scan the QR code to see ACTIVA BioACTIVE Bulk Flow in action.

The Bioactive Difference



The Bioactive Solution for Modern Dentistry Problems

Natural Remineralization Support¹

- Hardens demineralized dentin
- Supports minimally invasive dentistry and selective caries removal

Biofilm Modulation⁴

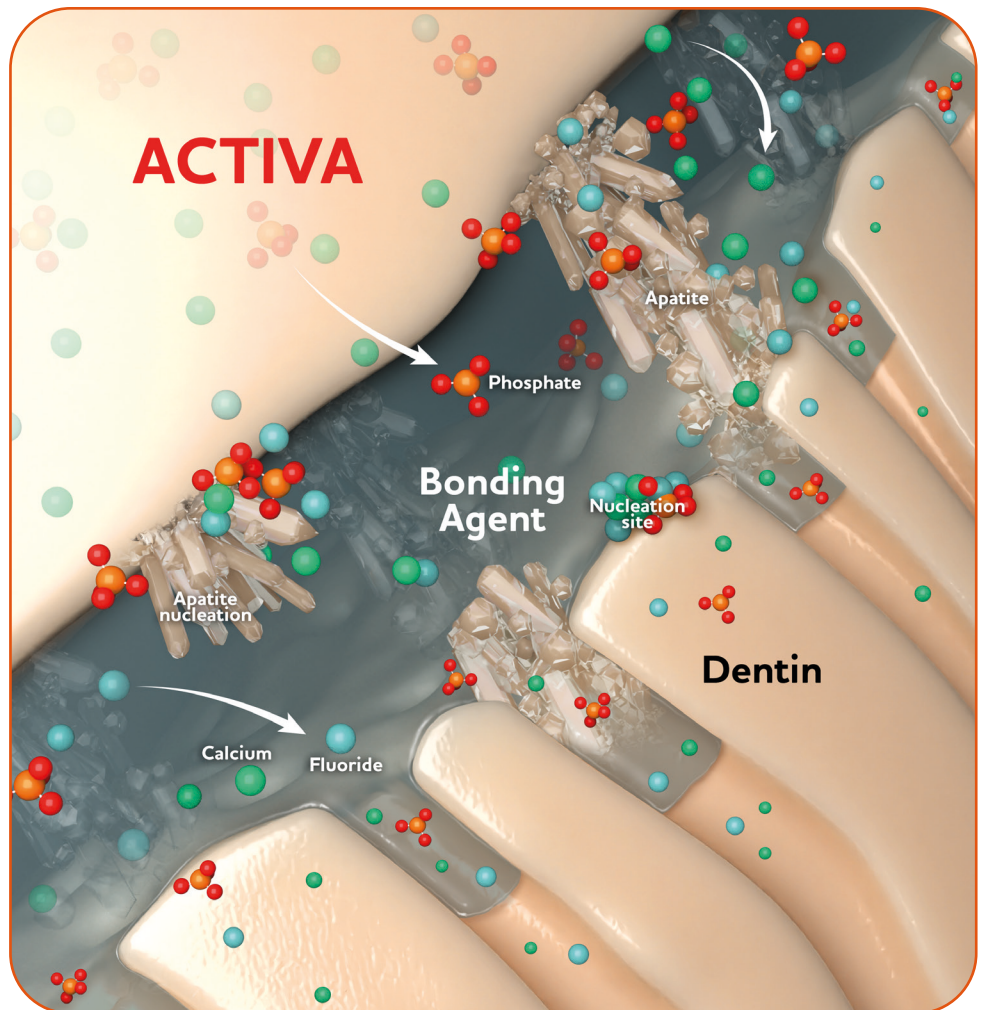
- Lower biofilm surface adhesion
- Lower plaque index scores and biofilm aggregation⁶

Reinforced Hybrid Layer

- Mineral apatite formation⁵ stabilizes hybrid layer over time
- Protects against secondary caries

Protects against the #1 cause of restoration failure:

Microleakage and secondary
caries due to adhesive/
hybrid layer degradation



- Adhesive/hybrid layers naturally degrade from hydrolysis, bacterial by-products, and MMPs.
- Bioactive ion release and mineral apatite formation stabilizes the adhesive layer over time, creating a longer-lasting protection for the tooth and restoration.



Apatite Formation Reinforces the Hybrid Layer

*Scanning electron micrographs of the ACTIVA BioACTIVE-RESTORATIVE groups showed a "thicker acid-base resistant hybrid-like layer with a distinct crystallization pattern." Raghip AG, Comisi JC, Hamama HH, Mahmoud SH. In vitro elemental and micromorphological analysis of the resin-dentin interface of bioactive and bulk-fill composites. Am J Dent. 2023;36{1}:3-7.

**3M and Filtek are not trademarks of Pulpdent Corporation.

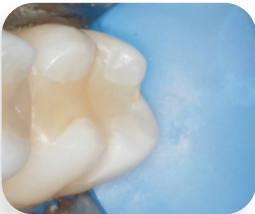
Universal Shade



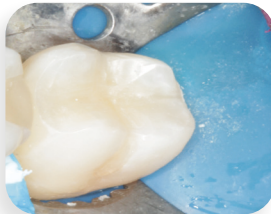
- ShadeFusion™ universal shade technology replaces common VITA shades
- Optimal chroma and translucency, highly esthetic
- Simplifies inventory



1. Pre-op



2. Immediate post-op



Images courtesy of Dr. Les Rykiss

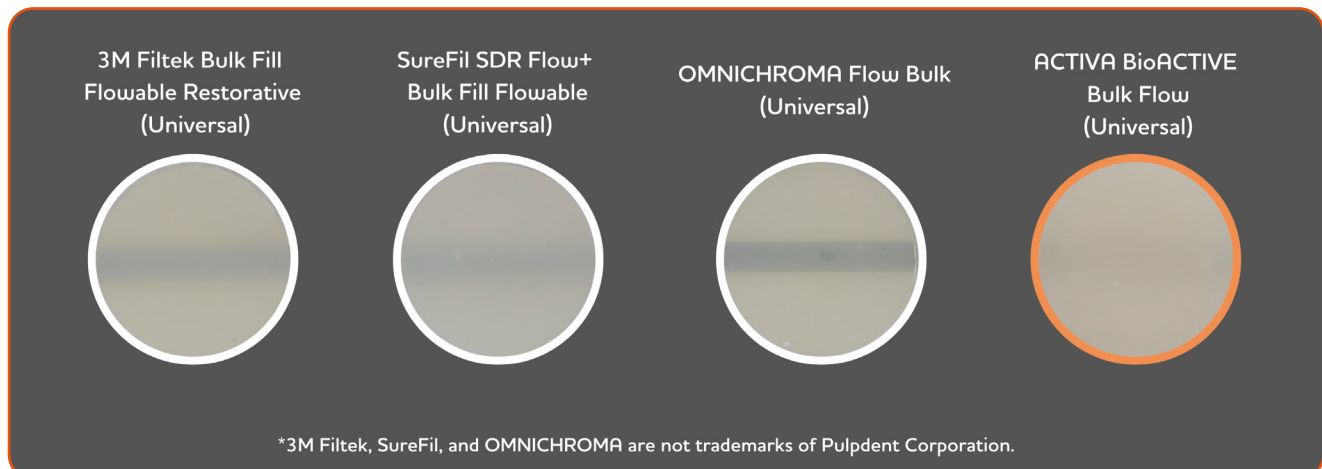
"ShadeFusion provides an incredible color match to natural tooth structure for this super strong and reliable restorative material."

– Dr. Les Rykiss



Balanced Opacity and Translucency

Ideal balance of translucency and opacity, less likely to require an opaquer or blocker:



Quick Start Guide



1. Prepare cavity.



2. Place matrix for Class II restoration. Establish sufficient separation, and burnish matrix for optimal contacts.



3. Apply adhesive system of choice. Follow manufacturer instructions. Compatible with total etch, self-etch, or selective-etch systems.

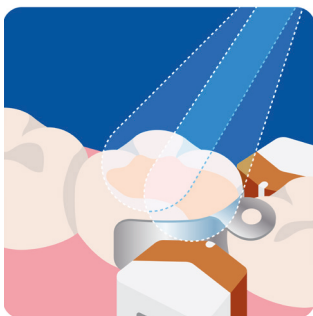
Choose either one-step bulk fill (4a) or dentin replacement capped with your choice of composite (4b).



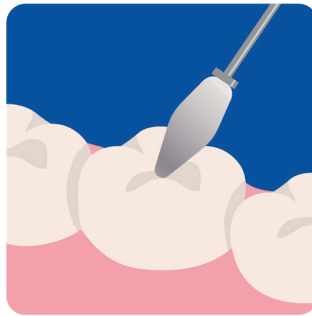
4a. Bulk fill with ACTIVA BioACTIVE Bulk Flow (OR see 4b for dentin replacement).



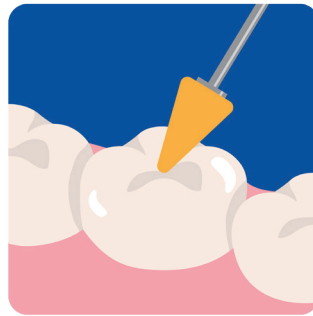
4b. Bulk fill with ACTIVA BioACTIVE Bulk Flow as dentin replacement. Place 1-2mm capping layer.



5. Allow 10 seconds to self-level. Light cure for 10 seconds (20 seconds with low-power/halogen curing light).



6. Sculpt final anatomy.

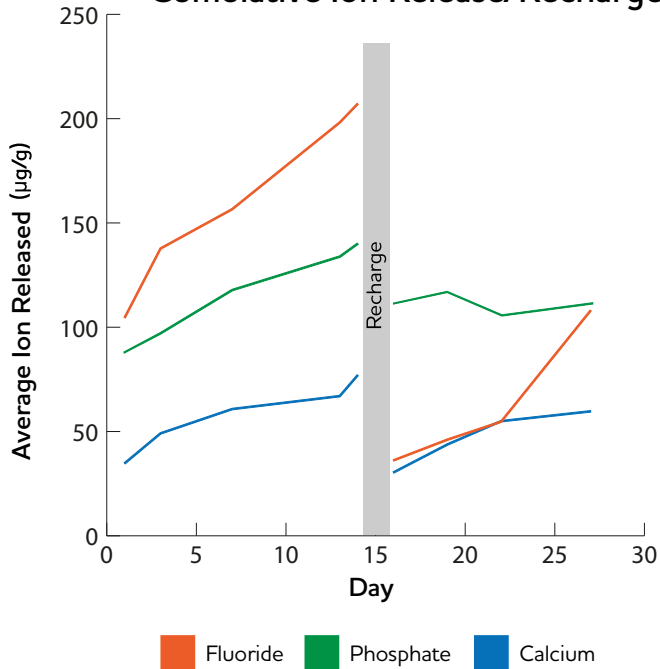


7. Finish and polish restoration.

Note: This guide is supplementary to the IFU. Always review the IFU before utilizing Pulpdent products in your practice.

Technical Profile & Performance

ACTIVA BioACTIVE Bulk Flow Cumulative Ion Release/Recharge



Source: Internal testing Watertown, MA

CUMULATIVE ION RELEASE/RECHARGE

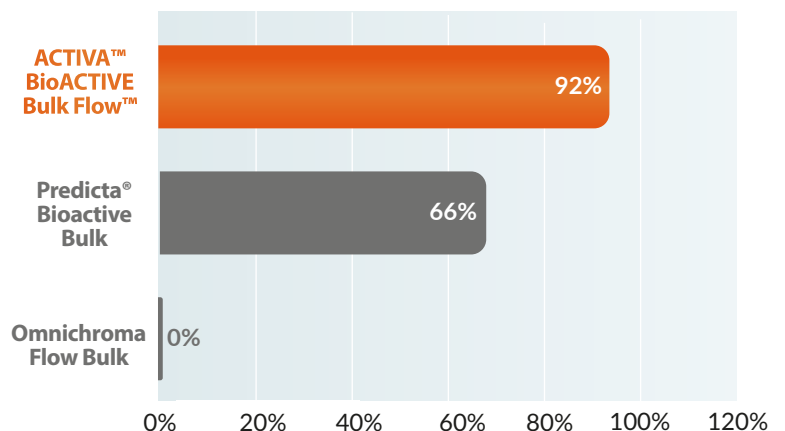
ACTIVA BioACTIVE Bulk Flow participates in a dynamic process of ionic exchange with saliva and tooth structure, continuously releasing and recharging calcium, phosphate, and fluoride ions and reacting to pH changes in the mouth.^{1,2,3}

EXCEPTIONAL MICROLEAKAGE PROTECTION

In a recent 60-day university study of prepared composite-tooth restorations exposed to experimental cariogenic conditions, ACTIVA BioACTIVE Bulk Flow experienced the lowest incidence of microleakage (highest survival/success rate for protection against microleakage) compared to competitors and traditional resin composite technologies. Sample survival rates after 60 days are shown here.

ACTIVA BioACTIVE Bulk Flow Microleakage Protection

Experimental Survival/Success Rate



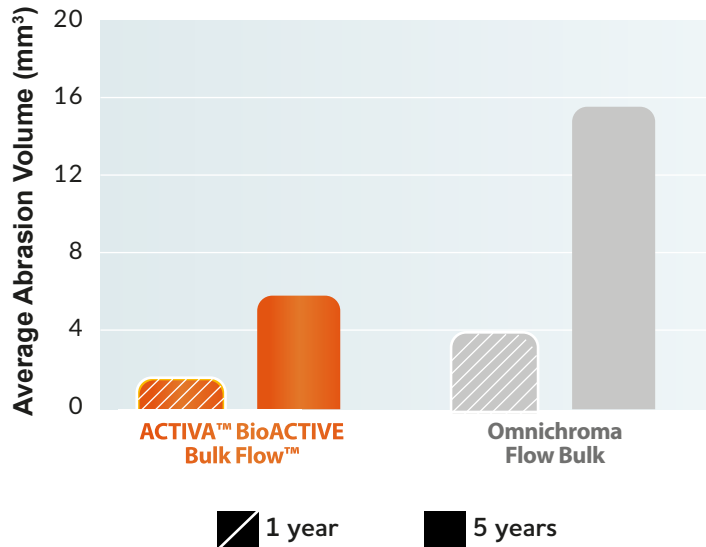
Source: "Cornelis H Pameijer, et al. "Efficacy of Bioactive Resin Composites in Sealing the Marginal Gap: An Ex Vivo Study". Scientific Archives Of Dental Sciences 7.9 (2025): 48-54."

Predicta and Omnicroma Flow Bulk are not trademarks of Pulpdent Corporation

Physical Properties – Cure Time: Light cure – 10 sec. (high power), 20 sec. (med./low power); Self-cure – 3 min.

ACTIVA BioACTIVE Bulk Flow Volume Wear

Chewing Simulation Test



Source: Independent third-party testing (SD Mechantronik)
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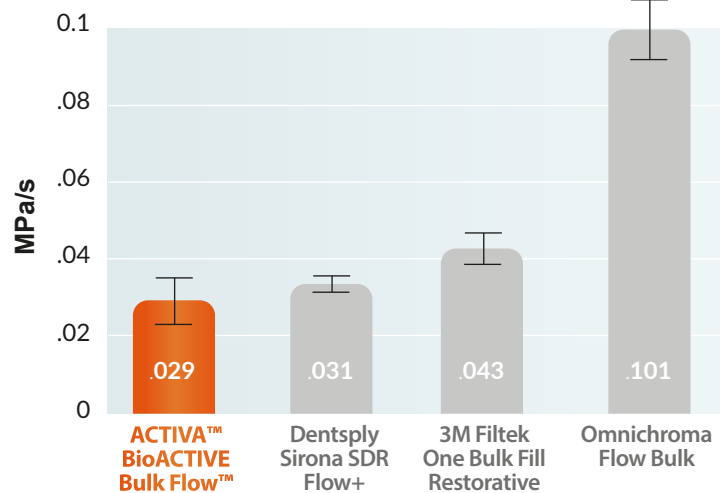
WEAR RESISTANCE

Superior physical properties allow for fewer instances where a capping layer is required. If indicated, a capping layer with universal composite may be added easily, such as in cases of bruxism or malocclusion.

BEST IN CLASS SHRINKAGE STRESS RATE¹⁰

Patented shrinkage stress reduction technology (MODULUS™) allows for worry-free bulk filling.

ACTIVA BioACTIVE Bulk Flow Max Stress Rate

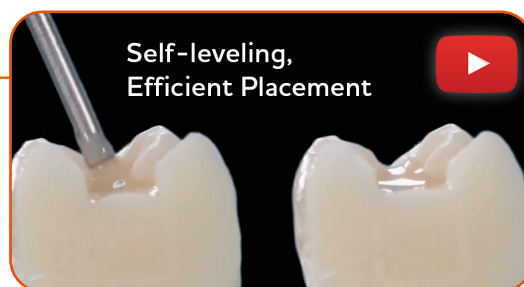
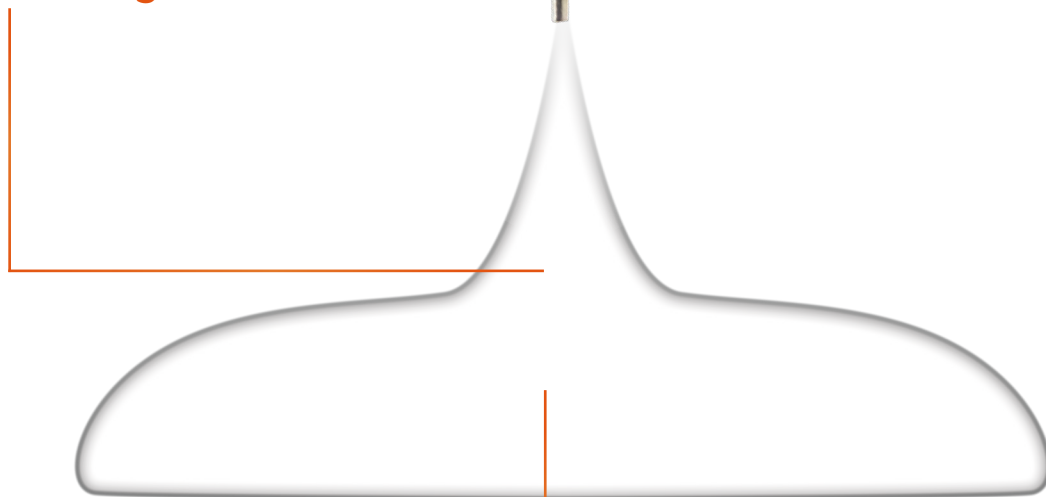


Source: Independent university testing
SDR, 3M Filtek, and Omnichroma Flow Bulk are not trademarks of Pulpdent Corporation.

Physical Properties – % Filler by Weight: 60% | Compressive Strength: 280 MPa | Flexural Strength: 110 MPa | Radiopacity: 200%

Handling

Self-leveling Flow



Excellent Adaptation

Lower viscosity self-leveling flow adapts to cavity prep without the need for additional manipulation, reducing the risk of voids and air bubbles. Easy to use automix syringe, ergonomic and precise.



“Where previous resins have underperformed, ACTIVA has consistently exceeded my expectations. Its lower viscosity and self-leveling properties lead to fewer voids and improved ease-of-use for Class II restorations.” – Dr. Raymond Zhu

Level Up Your Bulk Fill Flowable

Features & Benefits	ACTIVA™ BioACTIVE Bulk Flow™	Dentsply Sirona SDR® Flow+ (SureFil)	3M™ Filtek™ Bulk Fill Flowable Restorative	Omnichroma Flow Bulk
Remineralization Support & Biofilm Modulation	✓			
Self Leveling Flow & Adaptation	✓	✓		✓
Patented Anti-Stress & Anti-Shock Technology	✓	✓		
Dual Cure/Unlimited Depth-of-cure	✓			

SDR, 3M Filtek, and Omnichroma Flow Bulk are not trademarks of Pulpdent Corporation.

ACTIVA™ kids
BioACTIVE Bulk Flow™

Also available in off-white and universal pediatric shades



Scan for more information



¹The remineralization process is a natural repair mechanism to restore the minerals again, in ionic forms, to the hydroxyapatite (HAP) crystal lattice. Source: Arifa MK, Ephraim R, Rajamani T. Recent advances in dental hard tissue remineralization: a review of literature. *Intl J Clin Ped Dent.* 2019;12(2):139.

²Activa Bioactive physically seals the margin of the material and tooth interface through mineral apatite formation, subsequently protecting against microleakage, the leading cause of secondary caries and recurrent decay. Scanning electron micrographs of the Activa Bioactive-Restorative groups showed a "thicker acid-base resistant hybrid-like layer with a distinct crystallization pattern." (Raghip AG, Comisi JC, Hamama HH, Mahmoud SH. In vitro elemental and micromorphological analysis of the resin-dentin interface of bioactive and bulk-fill composites. *Am J Dent.* 2023;36(1):3-7.)

³"One-step" describes placement after preparation, etching, and bonding steps. Refer to Activa Bioactive Bulk Flow instructions for use (IFU) for complete instructions.

⁴Dual-cure mode

⁵Fan Y, Hubler D, Choochaisaengrat S, Giordano II R. Polymerization Shrinkage Stress of Novel Light Curing Dental Composites. Poster presented at American Association for Dental, Oral, and Craniofacial Research Annual Meeting; March 12–15, 2025; New York, NY.

⁶See: Maher YA, Rajeh MT, Hamooda FA et al. Evaluation of the Clinical Impact and In Vitro Antibacterial Activities of Two Bioactive Restoratives against *S. mutans* ATCC 25175 in Class II Carious Restorations. *Nigerian Journal of Clinical Practice*, 2023;26(4):404-411. Mah J, Merritt J, Ferracane J. Adhesion of *S. mutans* biofilms on potentially antimicrobial dental composites. *J Dent Res.* 2017;96:2560.

Order Today

Scan the QR code below for additional product information.



VBF1US	Single Pack Kit: 5g syringe + 10 Automix tips, universal shade (ShadeFusion)
VBF2US	Twin Pack Kit: 2 x 5g syringe + 20 Automix tips, universal shade (ShadeFusion)
VKBF1US	Kids Single Kit: 5g syringe + 10 Automix tips, universal shade (ShadeFusion)
VKBFS	Kids Twin Pack Kit: 2 x 5g syringe + 20 Automix tips, universal shade (ShadeFusion)
VKBF1OW	Kids Single Kit: 5g syringe + 10 Automix tips, pediatric/opaque white shade
T20G19	Automix tips, clear, with bendable 19-gauge metal cannula, pkg. of 20

ACTIVA™
BioACTIVE Bulk Flow™

