The Art of Temporary

Designed to mimic the esthetics and function of natural dentition, ExperTemp is a bis-acryl composite provisional material used to fabricate temporary crowns, bridges, inlays and onlays, as well as long-term temporaries, and will keep your patients’ smiles beautiful every step of the way.

- Easy to trim and polishes beautifully
- Available in multiple shades: A1, A2, A3, A3.5, B1, and Bleach White
- Low oxygen inhibition at polymerization
- Can be repaired with a packable composite, a flowable composite, or additional ExperTemp material
- High abrasion resistance and flexibility
- Intraoral set time of approximately 40–100 seconds
- Fluorescence similar to enamel

ExperTemp™
Temporary Crown & Bridge Material

1800 29 09 29 — ultradent.com.au

Since 1979 Ultradent Products, Inc. has been manufacturing the highest-quality dental products and equipment at our facility in the United States. Your support keeps Americans at work and helps improve the health and livelihood of citizens all over the country.

Ultradent is a proud USA manufacturer. To learn more visit ultradent.com/USA

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Products and Procedures Manual
Australia

2020
In 1976, after graduating from Loma Linda University and beginning his own practice, Dr. Dan Fischer invented his groundbreaking Astringedent® hemostatic solution in response to the need for a tissue management product that achieved more rapid, profound hemostasis. The success of Astringedent hemostatic fueled Dr. Fischer’s desire to continue developing innovative and more advanced dental solutions—leading to the founding of Ultradent, Product, Inc.

Now, marking its 44th year as a family-owned, international dental supply and manufacturing company, Ultradent has continued its vision to improve oral health globally by creating better dental products that continue to set new industry standards. Dr. Fischer has numerous patents to his name and regularly lectures and writes articles about state-of-the-art dentistry. He also works part-time in his daughter’s dental practice, which enables him to connect with patients and practice minimally invasive dentistry—a philosophy around which Ultradent develops its products and procedures.

Ultradent currently researches, designs, manufactures, and distributes more than 500 materials, devices, and instruments used by dentists around the world. This includes its renowned, industry-leading Opalescence® Tooth Whitening System, and the groundbreaking Opalescence Go® professional take-home whitening system. Ultradent’s product family also includes the award-winning VALO® LED curing light, UltraSeal XT® hydro pit and fissure sealant, and Ultra-Etch® etchant. Recent new innovations include the Uvemeer® composite veneer template system, which creates natural-looking, high-quality direct composite veneers quickly and easily.

Ultradent has been the recipient of Small Business Administration’s Exporter of the Year and Direct Distributor of the Year awards. Most recently, Ultradent was the recipient of the Health Care Heroes award in the category of Corporate Achievement. Ultradent and Dr. Fischer have been recognized for outstanding industry leadership and for making defining contributions to the dental community. In 2013, the Utah Governor’s Office of Economic Development named Dr. Fischer “International Man of the Year” for his contributions to sustaining economic and cultural relations between the state of Utah and the European Union.

Dr. Fischer lives his life according to the same values that guide Ultradent: integrity, quality, hard work, innovation, and care. When he isn’t working, he enjoys tending to his garden and spending time with his wife, children, and 33 grandchildren.

Dr. Fischer strives continuously to “improve Oral Health Globally.” Beyond the dental community, Ultradent donates products to humanitarian efforts locally, nationally, and internationally. Additionally, Ultradent sponsors a nonprofit organization, the Diversity Foundation, a progressive outreach program committed to preventing hate crimes and intolerance. This program promotes diversity and fosters multicultural awareness among individuals from all backgrounds.

All UPI syringes are stamped with an expiration date consisting of one letter and 3 numbers. The letter is a lot number used for manufacturing purposes, and the 3 numbers are the expiration date. The first 2 numbers are the month, and the third number is the last number of the year.

### Policies

Ultradent is committed to products that strengthen the clinician’s ability to administer professional state-of-the-art patient care. This may involve the development of new products or a refinement of existing materials and techniques. Our highest priority is to meet your needs with quality products and service. We appreciate your suggestions, questions, and comments.

We believe in our products and sample as much as possible. Please help us continue this practice by requesting only one sample per doctor per product.

This catalog and the products described herein are intended for lawful distribution in the USA. In certain countries outside the USA, differing legal requirements may limit the availability of certain products or provide for different product indications and claims under labeling compatible with local conditions. For more detailed procedures and precautions, refer to individual product instructions or packaging.

### Ordering

You can call us direct at 1800 29 09 29 or contact one of our Dealers in Australia or New Zealand directly.

### Packaging

At Ultradent we are committed to environmental concerns. For that reason we try to use as little plastic as possible in our packaging. However, for your safety and the proper preservation of our chemicals, many times we must include a secondary plastic package.

---

### ULTRADENT IS PROUD TO BE ISO 13485 CERTIFIED.

ISO 13485 certification signifies that Ultradent has developed and implemented an uncompromising quality system, encompassing every aspect of our business. Ultradent is audited and certified by a CAN/CSA recognized Independent European Notified Body, which assures that the quality system is being carried out in accordance with the requirements of ISO 13485.

### ULTRADENT IS PROUD TO OFFER CE MARK CERTIFIED PRODUCTS FOR EUROPE.

Where appropriate, Ultradent products sold in Europe bear the CE Mark, indicating that our products comply with the strict European Community laws (directives).

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**0100 = Lot number**

**0100 = Month, October**

**0100 = Year, 2020**

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**0100 = Lot number**

**0100 = Month, October**

**0100 = Year, 2020**

---
### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CEMENTS</strong></td>
<td>1-10</td>
</tr>
<tr>
<td>Polyvinyl Silicone/Luting/Filling Material</td>
<td></td>
</tr>
<tr>
<td>Temporary Veneer Cement</td>
<td></td>
</tr>
<tr>
<td>Light-Cure Veneer Luting Resin</td>
<td></td>
</tr>
<tr>
<td>Dual-Cure Composite Luting/Restorative Resin</td>
<td></td>
</tr>
<tr>
<td>Temporary Crown and Bridge Material</td>
<td></td>
</tr>
<tr>
<td><strong>COMPOSITES</strong></td>
<td>11-23</td>
</tr>
<tr>
<td>Esthetic Restorative Material</td>
<td></td>
</tr>
<tr>
<td>Composite Gun</td>
<td></td>
</tr>
<tr>
<td>Composite Wetting Resin</td>
<td></td>
</tr>
<tr>
<td>Flowable Composite</td>
<td></td>
</tr>
<tr>
<td>Direct Composite Template System</td>
<td></td>
</tr>
<tr>
<td><strong>ENDODONTICS</strong></td>
<td>25-39</td>
</tr>
<tr>
<td>Repair Material</td>
<td></td>
</tr>
<tr>
<td>Canal Sealer</td>
<td></td>
</tr>
<tr>
<td>Vacuum Adapter</td>
<td></td>
</tr>
<tr>
<td>File Lubricants</td>
<td></td>
</tr>
<tr>
<td>Calcium Hydroxide Paste</td>
<td></td>
</tr>
<tr>
<td>Flowable Composite</td>
<td></td>
</tr>
<tr>
<td><strong>ETCH AND BOND</strong></td>
<td>41-50</td>
</tr>
<tr>
<td>Self-Etching Primer</td>
<td></td>
</tr>
<tr>
<td>Light-Cure Adhesive</td>
<td></td>
</tr>
<tr>
<td>Zirconia/Metal Primer</td>
<td></td>
</tr>
<tr>
<td>Two-Part Bonding System</td>
<td></td>
</tr>
<tr>
<td>Etchant</td>
<td></td>
</tr>
<tr>
<td>Porcelain Etch and Silane</td>
<td></td>
</tr>
<tr>
<td>Porcelain Repair Liner</td>
<td></td>
</tr>
<tr>
<td><strong>EQUIPMENT</strong></td>
<td>51-66</td>
</tr>
<tr>
<td>LED Curing Lights</td>
<td></td>
</tr>
<tr>
<td>LED Cordless Curing Light</td>
<td></td>
</tr>
<tr>
<td>Curing Light Accessories</td>
<td></td>
</tr>
<tr>
<td>Protective Eyewear</td>
<td></td>
</tr>
<tr>
<td>Vacuum Former</td>
<td></td>
</tr>
<tr>
<td>Cutters and Scissors 810 - 960 Diode Laser</td>
<td></td>
</tr>
<tr>
<td><strong>FINISH</strong></td>
<td>67-73</td>
</tr>
<tr>
<td>Composite System</td>
<td></td>
</tr>
<tr>
<td>Diamond Polish</td>
<td></td>
</tr>
<tr>
<td>Goat Hair Brush</td>
<td></td>
</tr>
<tr>
<td>Polishing Brushes</td>
<td></td>
</tr>
<tr>
<td>Composite Sealer</td>
<td></td>
</tr>
<tr>
<td>Drying Agent</td>
<td></td>
</tr>
<tr>
<td><strong>IMPRESSIONS</strong></td>
<td>75-78</td>
</tr>
<tr>
<td>Vinyl Polysiloxane Impression Material</td>
<td></td>
</tr>
<tr>
<td>Bite Registration Material</td>
<td></td>
</tr>
<tr>
<td>Dispensing Gun</td>
<td></td>
</tr>
<tr>
<td>Impression Material Accessories</td>
<td></td>
</tr>
<tr>
<td><strong>PREVENT AND HYGIENE</strong></td>
<td>79-85</td>
</tr>
<tr>
<td>Caries Indicator</td>
<td></td>
</tr>
<tr>
<td>Mouth Prop</td>
<td></td>
</tr>
<tr>
<td>Disposable Retainer and Matrix</td>
<td></td>
</tr>
<tr>
<td>Cavity Sealant</td>
<td></td>
</tr>
<tr>
<td>Toothpaste</td>
<td></td>
</tr>
<tr>
<td><strong>PREPARE</strong></td>
<td>87-94</td>
</tr>
<tr>
<td>Hydrophobic Sealant</td>
<td></td>
</tr>
<tr>
<td>Drying Agent</td>
<td></td>
</tr>
<tr>
<td>Hydrophilic Sealant</td>
<td></td>
</tr>
<tr>
<td>Fluoride Varnish</td>
<td></td>
</tr>
<tr>
<td>Dentin Sealant</td>
<td></td>
</tr>
<tr>
<td><strong>TIPS AND SYRINGES</strong></td>
<td>95-102</td>
</tr>
<tr>
<td>Floss Tips</td>
<td></td>
</tr>
<tr>
<td>Brush Tips</td>
<td></td>
</tr>
<tr>
<td>Mini Tips</td>
<td></td>
</tr>
<tr>
<td>Micro Tips</td>
<td></td>
</tr>
<tr>
<td>Dento-Inflator Tips</td>
<td></td>
</tr>
<tr>
<td>Mixing Tips</td>
<td></td>
</tr>
<tr>
<td>Impression Tips</td>
<td></td>
</tr>
<tr>
<td><strong>TISSUE MANAGEMENT</strong></td>
<td>103-115</td>
</tr>
<tr>
<td>Ferric Sulfate</td>
<td></td>
</tr>
<tr>
<td>Aluminum Chloride</td>
<td></td>
</tr>
<tr>
<td>Iron Solution</td>
<td></td>
</tr>
<tr>
<td>Regular Knitted Cord</td>
<td></td>
</tr>
<tr>
<td>Packing Instruments</td>
<td></td>
</tr>
<tr>
<td><strong>WHITEN</strong></td>
<td>117-138</td>
</tr>
<tr>
<td>Whitening Gel</td>
<td></td>
</tr>
<tr>
<td>Shade Guide Card</td>
<td></td>
</tr>
<tr>
<td>Tray Cases</td>
<td></td>
</tr>
<tr>
<td>Prefilled Whitening Trays</td>
<td></td>
</tr>
<tr>
<td>In-Office Whitening</td>
<td></td>
</tr>
<tr>
<td>Cheek Retractors</td>
<td></td>
</tr>
<tr>
<td>Bite Block</td>
<td></td>
</tr>
<tr>
<td><strong>MARKETING MATERIALS</strong></td>
<td>139-144</td>
</tr>
<tr>
<td>Light-Cured Resin Barriers</td>
<td></td>
</tr>
<tr>
<td>Endodontic Whitening</td>
<td></td>
</tr>
<tr>
<td>Desensitizing Gel</td>
<td></td>
</tr>
<tr>
<td>Hydrochloric Acid</td>
<td></td>
</tr>
<tr>
<td>Block-Out Resin</td>
<td></td>
</tr>
<tr>
<td>Tray Sheets</td>
<td></td>
</tr>
<tr>
<td>Cutters and Scissors</td>
<td></td>
</tr>
<tr>
<td>Reminder: To use this catalogue, whenever you see a QR Code like the one below, you can use the camera on your smart phone to take you directly to the associated product! Simply open your camera, point the lens at the QR Code and click the link that comes up.</td>
<td></td>
</tr>
</tbody>
</table>
CEMENTS

UltraTemp
ClearTemp LC
PermaShade LC
PermaFlo DC
UltraCem
ExperTemp
## UltraTemp® UltraTemp® REZ ClearTemp® LC PermaFlo® DC UltraCem® PermaShade® LC

<table>
<thead>
<tr>
<th>Description</th>
<th>Temporary luting cement</th>
<th>Temporary luting cement</th>
<th>Temporary veneer cement</th>
<th>Luting/restorative cement</th>
<th>Resin-reinforced glass ionomer luting cement</th>
<th>Veneer cement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>Paste-to-paste, non-eugenol polycarboxylate</td>
<td>Paste-to-paste, non-eugenol resin-based</td>
<td>Composite resin</td>
<td>Highly filled small-particle composite resin</td>
<td>Liquid-powder RMGI (RMGI)</td>
<td>Composite resin</td>
</tr>
<tr>
<td>Indications for Use</td>
<td>Temporary cementation of provisional crowns, bridges, inlays, and onlays</td>
<td>Temporary cementation of provisional crowns, bridges, inlays, and onlays</td>
<td>Temporary cementation of provisional veneers</td>
<td>Permanent cementation of crowns, inlays, onlays, endodontic post cementation, and fabrication of core buildups</td>
<td>Permanent cementation of restorations (including inlays, onlays, crowns, and bridges) made of metal, PFM, zirconia, and resin to natural teeth</td>
<td>Permanent cementation of porcelain, zirconia, composite, and other indirect anterior veneers</td>
</tr>
<tr>
<td>Delivery</td>
<td>5 ml dual-barrel syringe with mixing tip</td>
<td>5 ml dual-barrel syringe with mixing tip</td>
<td>0.67 g contra-angle syringe</td>
<td>5 ml dual-barrel syringe with mixing tip</td>
<td>Additional intraoral tip for precise delivery</td>
<td>0.3 g unit-dose SpeedMix™ syringe or hand-mix bottle kit: 15 g powder / 8.6 ml liquid</td>
</tr>
<tr>
<td>Cure Type</td>
<td>Self cure</td>
<td>Self cure</td>
<td>Light cure</td>
<td>Dual cure</td>
<td>Self cure</td>
<td>Light cure</td>
</tr>
<tr>
<td>Working Time/ Set Time</td>
<td>Regular Set 2 minutes</td>
<td>Regular Set: 2–3 minutes, Fast Set: 1–2 minutes</td>
<td>Light cure with VALO® curing light for 10 seconds</td>
<td>2.5 minutes working time, full set in 5–8 minutes. Light cure with VALO® curing light according to instructions.</td>
<td>1–3 minutes working time, full set in 5 minutes</td>
<td>2-second tack cure to avoid shifting. Light cure with VALO® curing light for 10 seconds.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Flowable</td>
<td>Flowable</td>
<td>Medium</td>
<td>Flowable</td>
<td>Very flowable</td>
<td>Medium</td>
</tr>
<tr>
<td>Shades</td>
<td>Off-white</td>
<td>Off-white</td>
<td>Translucent (fluoresces under a UV light)</td>
<td>A2, A3.5, Translucent, Opaque White</td>
<td>Approximately A2</td>
<td>A2, B1, Translucent, Opaque White</td>
</tr>
<tr>
<td>Differentiation</td>
<td>Mixes and delivers in one action. Hydrophilic polycarboxylate formula is kind to pulp. Ideal for sealing the access opening of walking bleach cases. Designed to flake off easily.</td>
<td>Mixes and delivers in one action. Hydrophilic resin-based formula is well suited for cases when longer retention is required. Available in Regular and Fast set times. Designed to remove in large flakes.</td>
<td>Provides the additional strength necessary to keep provisional veneers in place. Fluorides under a UV light for easy detection. Adheres more to the provisional than the tooth.</td>
<td>Lowest film thickness (9 µm) known for a luting cement. Higher compressive bond strength than other quality luting cements. Economically priced.</td>
<td>Unique SpeedMix™ syringe delivery is the most efficient way to deliver a liquid-powder formula. Features highest bond strengths to metal or dentin compared to other cements in its category.</td>
<td>Low shade shift for a lasting esthetic result. Unique contra-angle delivery for added precision and convenience. Low shrinkage stress reduces strain on veneers at polymerization.</td>
</tr>
</tbody>
</table>

### TEMPORARY

<table>
<thead>
<tr>
<th>Indications for Use</th>
<th>Self Cure</th>
<th>Self Cure</th>
<th>Light Cure</th>
<th>Dual Cure</th>
<th>Self Cure</th>
<th>Light Cure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crown</td>
<td>X</td>
<td>X</td>
<td>Light Cure</td>
<td>X</td>
<td>X</td>
<td>Light Cure</td>
</tr>
<tr>
<td>Bridge</td>
<td>X</td>
<td>x</td>
<td>Light Cure</td>
<td>X</td>
<td>X</td>
<td>Light Cure</td>
</tr>
<tr>
<td>Veneer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Light Cure</td>
</tr>
<tr>
<td>Post Cementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Light Cure</td>
</tr>
<tr>
<td>Core Buildup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Light Cure</td>
</tr>
<tr>
<td>Walking Bleach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Light Cure</td>
</tr>
<tr>
<td>Crown and Bridge for Implants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Light Cure</td>
</tr>
<tr>
<td>Endo Access Opening</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Light Cure</td>
</tr>
<tr>
<td>Orthodontic Bands</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Light Cure</td>
</tr>
<tr>
<td>Pedodontics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Light Cure</td>
</tr>
<tr>
<td>Inlays/Onlays</td>
<td>X</td>
<td>X</td>
<td>Light Cure</td>
<td>X</td>
<td>X</td>
<td>Light Cure</td>
</tr>
</tbody>
</table>

Temporarily unavailable

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**UltraTemp cement**

<table>
<thead>
<tr>
<th>Strength</th>
<th>0.15 MPa</th>
<th>0.5 MPa</th>
<th>2.0 MPa</th>
<th>10–13 MPa</th>
<th>35–40 MPa</th>
<th>55–60 MPa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOND STRENGTHS: Lowest to Highest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Data on file
UltraTemp®
POLYCARBOXYLATE, NON-EUGENOL
TEMPORARY LUTING/FILLING MATERIAL

- Non-eugenol formula won’t interfere with resin bonding
- Convenient dual-barrel syringe delivery of paste-to-paste formulas
- Mixing tips provide even mixing for reliable adhesion
- Provide optimal sealing capabilities once cured
- Able to withstand normal biting and chewing forces
- Water soluble for easy removal at the right time
- Hydrophilic, polycarboxylate chemistry ensures low irritation to pulp and a quality seal
- Use to cover access for intercoronal whitening

UltraTemp luting material is suggested for routine 1- to 2-week temporization of custom-fabricated provisionals or standard preformed provisionals where adequate retention exists.

PROCEDURE

1. Prior to complete set, remove excess UltraTemp luting material easily with a moist cotton swab or gauze. Following subgingival set of 1–2 minutes, remove quickly with explorer.

2. Upon provisional removal, shown here 2 weeks post-op, cement clings to both provisional and preparation. This is VALUABLE. This is one indicator of a quality sealing cement.

3. Quickly remove bulk of residual cement. Note well-healed tissues; UltraTemp filling material is kind to tissue.

4. Use Consepsis® Scrub abrasive slurry with a rubber cup or STARbrush® brush to remove residual cement.

Even a temporary restoration should maintain both the function and esthetics of natural dentition. With ExperTemp temporary crown and bridge material you can create provisionals that will closely resemble the final restoration and keep your patients smiling between appointments.

See page 10!
ClearTemp® LC temporary veneer cement is designed specifically for temporary veneers. Its proprietary, light-cured resin formula provides the additional strength required to keep provisional veneers in place. ClearTemp LC cement will also adhere more to the provisional than to the tooth, minimizing the time and effort required to remove it from the preparation. For luting temporary veneers, nothing will hold as strong or look as natural as ClearTemp LC temporary veneer cement.

**ESTHETIC**

Today’s provisionals look more natural than ever. ClearTemp LC cement helps create a short-term smile that patients will be proud to reveal.

**COMPARE**

A traditional temporary cement shows through the provisional crown on #8. ClearTemp LC cement does not show through the provisional veneer on #9.

**PROCEDURE**

1. Remove product from refrigerator and bring to room temperature. Clean, rinse, and lightly dry preparation. Express enough ClearTemp LC cement to coat inside surface of provisional.

2. Seat temporary veneer on preparation and remove flash. Light cure for 10 seconds on standard mode with VALO curing light. For curing lights with output <600 mW/cm², cure 20 seconds.

3. Use a hand instrument at acrylic margin to break seal and remove provisional. ClearTemp LC cement is very strong and has high adhesion, so temporary veneers may break upon removal. Flake off bulk residual cement with a blunt hand instrument.

4. Illuminate surface with UV light to reveal remaining ClearTemp LC cement. Remove any remaining cement and recheck. Scour prep with pumice-type slurry and cup or brush. Rinse thoroughly and prepare for final cementation.

**Note:** Due to its high bond strength compared to other temporary cements, ClearTemp LC temporary veneer cement should be used for temporary veneers ONLY.

We recommend PermaShade® LC veneer cement for luting permanent veneers. See the next page.

**REFRIGERATE**

3518 ClearTemp LC Syringe 4pk
0.67 g syringes

1. realityesthetics.com

ClearTemp LC cement fluoresces under black light for easy detection. It is also designed to adhere more to provisional than to preparation. Use black light to ensure complete removal of ClearTemp LC cement. This is an important step that minimizes potential to damage final restoration. Use the VALO® black light lens attachment or UltraSeal® XT hydro black light keychain for high visibility.
PermaShade® LC
LIGHT-CURE VENEER LUTING RESIN

- Unsurpassed low shade shift
- Medium viscosity keeps veneer from drifting once seated
- Use for porcelain, zirconia, composite, and other indirect veneers

PermaShade LC luting resin is a light-cured luting resin used exclusively for cementing veneers. Its ergonomic contra-angle syringe makes luting delicate veneers more convenient than other delivery methods. With enduring color stability and low shrinkage, PermaShade LC luting resin is ideal for creating a long-lasting, aesthetic veneer smile.

INDEPENDENT STUDY

Independent university tests confirm PermaShade LC luting resin showed no perceptible shade shift after an accelerated aging process. Light-cured resins tend to be more color stable due to the addition of non-aromatic aliphatic amines, which are resistant to oxidation. ΔE shade shift is less than 3. (3 or higher is visible to the human eye.)

REFRIGERATE

| 5227 | PermaShade LC Translucent Syringe 4pk |
| 5228 | PermaShade LC Opaque White Syringe 4pk |
| 5229 | PermaShade LC A2 Syringe 4pk |
| 5230 | PermaShade LC B1 Syringe 4pk |

0.95 g syringes


Low shrinkage stress reduces strain on veneer, minimizing risk of post-cure breakage.2
PermaFlo® DC

DUAL-CURE COMPOSITE LUTING/RESTORATIVE RESIN

- Multiple uses including post cementation, core build up, and luting
- Wear resistant
- Maximum strength
- Radiopaque
- Low polymerization shrinkage
- Self-mixing
- Redesigned syringe for easy dispensing
- 2.5 minutes working time, 5–8 minutes set time

PermaFlo DC luting resin is a highly filled, small-particle, dual-cure resin that flows easily through a small-orifice tip, making post luting simple and convenient. It has the lowest film thickness of only 9 μm.

PermaFlo DC luting resin is recommended for permanent cementation of opaques, total ceramic crowns, etc. You can use the same mix and delivery method to lute posts and fabricate core buildups. Its optimal viscosity flows easily into the depths of the post preparation and then intimately around protruding, direct-placed posts. To stop material flow during core buildup, tack with a curing light. PermaFlo DC is compatible with Peak® Universal Bond adhesive for light-cured bonding and luting.

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Shear Bond Strength to Enamel (Total-Etch)</td>
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<tr>
<td>Shear Bond Strength to Dentin (Total-Etch)</td>
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<tr>
<td>Flexural Strength</td>
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<td>Flexural Modulus</td>
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<td>Compressive Strength</td>
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<tr>
<td>Compressive Modulus</td>
<td>4.22 MPa</td>
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**FILM THICKNESS**

<table>
<thead>
<tr>
<th>Resin</th>
<th>Film Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>PermaFlo® DC Resin</td>
<td>9 μm</td>
</tr>
<tr>
<td>Calitra®</td>
<td>12 μm</td>
</tr>
<tr>
<td>Multilink® AutoMix®</td>
<td>48 μm</td>
</tr>
<tr>
<td>RelyX® ARC®</td>
<td>16 μm</td>
</tr>
<tr>
<td>Ultra-Bond® Plus®</td>
<td>31 μm</td>
</tr>
</tbody>
</table>

PermaFlo DC resin has the lowest film thickness known for a composite luting resin.

**REFRIGERATE**

- PermaFlo DC A2 Syringe Kit
- PermaFlo DC A3.5 Syringe Kit
- PermaFlo DC Translucent Syringe Kit
- PermaFlo DC Opaque White Syringe Kit

1 x 5 ml PermaFlo DC syringe
20 x Mixing tips
20 x Intraoral tips

* Trademark of a company other than Ultradent. 1. Data on file.
1. Determine post size and length using a try-in post or X-ray and clinical judgment.

2. Place a rubber stop on UniCore® Drill at desired length.

3. Position UniCore tip in pilot hole. Using light pressure, follow obturation material to length indicated by rubber stop. Keeping drill at full speed, withdraw from canal.

4. Use TriAway™ Adapter with Endo-Eze® 22 ga tip to rinse debris out of post space with water and suction.

5. Blow out excess water with TriAway Adapter and Endo-Eze 22 ga tip to dry canal.

6. Verify post size by placing corresponding UniCore post and seat to length. Then trim post to appropriate length using a diamond disc.


8. Use TriAway Adapter and Endo-Eze 22 ga tip to rinse thoroughly with water and lightly air dry, leaving the post space slightly damp.

9. Use 30 ga NaviTIP® FX® tip or Micro Applicator to place Peak® Universal Bond adhesive. Scrub full length of post space and entire tooth prep for 10 seconds.

10. Remove excess Peak Universal Bond adhesive using the TriAway Adapter with 22 ga Endo-Eze tip and suction. Continue for 10 seconds at ½ air pressure.

11. Light cure adhesive in post space for 20 seconds. If close to gingiva, use two 10 second intervals or 6 seconds Xtra Power mode on VALO® curing light.

12. Verify UniCore Post will seat prior to placing luting cement.

13. Load PermaFlo DC into the Skini syringe with the pink 20 ga Endo-Eze™ tip. Verify mix and flow.

14. Use the pink Endo-Eze 20 ga tip to deliver mixed PermaFlo DC cement into post space beginning apically and moving coronally.

15. Insert post slowly and seat to predetermined depth.

16. Light cure PermaFlo DC cement in canal through post with VALO curing light for 20 seconds. If close to gingiva use two 10 second intervals or Xtra Power mode on VALO curing light.

16. Express PermaFlo DC cement around post for core buildup. If cement starts to slump, light cure for 5 seconds between layers. Incrementally build up core.

Note: Use the VALO curing light with the barrier sleeves during procedure.
UltraCem resin-reinforced glass ionomer cement offers the best of both worlds in a luting cement: efficient delivery and unsurpassed performance. Its advanced chemistry boasts the highest bond strengths in its category, while its unique SpeedMix™ syringe ensures the ultimate luting convenience. UltraCem cement is also available in a traditional hand-mix bottle kit, an economical choice that gives clinicians control over the viscosity and amount of material used.

UltraCem resin-reinforced glass ionomer cement is used as a luting cement for indirect restorations (including inlays, onlays, crowns, and bridges) made of metal, porcelain fused to metal, zirconia, and resin. It may also be used for cementation of orthodontic bands to enamel.

For zirconia restorations only, apply Peak® Universal Bond adhesive to the preparation using a scrubbing motion for 10 seconds. (No etchant required.) Aggressively air thin until surface appears dull and light cure for 10 seconds with VALO® curing light. For best results, sandblast the inside of the zirconia prosthesis; clean with an air/water spray, and dry.

Note: Never use phosphoric acid to clean zirconia, as it will significantly reduce bond strengths. Do not use a zirconia primer with UltraCem cement.
UltraCem® SpeedMix™ Syringe

- Faster than hand mixing
- No need for trituratation
- No additional tips or parts required
- Consistent mixing ratios every time
- Unit-dose delivery for low risk of contamination
- Effectively mixes and delivers a superior liquid-powder formula in seconds with no mess

1. Flick/tap barrel 4 times to fluff powder.
2. Press white stem firmly into green stem to push liquid into powder chamber.
3. Leave metal rod in place: grasp plastic delivery/mixing tip and mix chemical 10 to 15 times vigorously back and forth.
4. Fully extend delivery/mixing tip.
5. Discard metal rod yellow clip.
6. Express material into prosthesis.

2056 UltraCem Liquid-Powder Bottle Kit
1 x 15 g bottle of powder
1 x 8.6 ml bottle of liquid
1 x Mixing pad
1 x Measuring spoon
1 x Spatula

2058 UltraCem SpeedMix Syringe 2pk
0.3 g syringes

2057 UltraCem SpeedMix Syringe 20pk
0.3 g syringes

* Trademark of a company other than Ultradent. 1. Data on file.
**ExperTemp®**

TEMPORARY CROWN AND BRIDGE MATERIAL

- Trims easily and polishes beautifully (polishing optional)
- Low oxygen inhibition at polymerization
- 10:1 self-cured chemistry provides exceptional strength, flexibility, and high abrasion resistance
- Can be repaired with a packable composite, a flowable composite, or additional ExperTemp material
- Fluoresces similarly to enamel
- Available in A1, A2, A3, A3.5, B1, and Bleach White shades

ExperTemp temporary crown and bridge material is a bis-acryl composite provisional material used to fabricate temporary crowns, bridges, inlays, and onlays as well as long-term temporaries. Superior performance combined with a natural esthetic make ExperTemp material the material of choice for temporization.

**FLEXURAL MODULUS COMPARATIVE**

<table>
<thead>
<tr>
<th>Material</th>
<th>Modulus (GPa)</th>
</tr>
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<tbody>
<tr>
<td>ExperTemp® Material</td>
<td>4.91</td>
</tr>
<tr>
<td>Luxatemp Ultra®</td>
<td>4.16</td>
</tr>
<tr>
<td>Structur Premium®</td>
<td>4.09</td>
</tr>
<tr>
<td>Integrity® Multi-Cure</td>
<td>2.67</td>
</tr>
<tr>
<td>Protemp™ Plus®</td>
<td>2.31</td>
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</table>

**EDGE CHIP COMPARATIVE**

<table>
<thead>
<tr>
<th>Material</th>
<th>Chip Strength (lbf)</th>
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</thead>
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<tr>
<td>ExperTemp® Material</td>
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<tr>
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<tr>
<td>Protemp™ Plus®</td>
<td>145.46</td>
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<tr>
<td>Luxatemp Ultra®</td>
<td>144.08</td>
</tr>
<tr>
<td>Integrity® Multi-Cure</td>
<td>137.27</td>
</tr>
</tbody>
</table>

**PROCEDURE**

1. ExperTemp temporary crown and bridge with esthetic translucency.
4. Use blade to trim temporary crown and bridge without altering margins.
5. ExperTemp material achieves esthetic blend with natural teeth.

**EXPERIMENTAL CEMENTS**

- Integrity® Multi-Cure®
- Luxatemp® Ultra®
- Structur Premium®
- Protemp™ Plus®
- ExperTemp® Material

**192.60 lbf**

**100 125 150 175 200 225**

1. ExperTemp temporary crown and bridge with esthetic translucency.
4. Use blade to trim temporary crown and bridge without altering margins.
5. ExperTemp material achieves esthetic blend with natural teeth.
6. Adjust provisional.

**ExperTemp Dispensing Gun 1pk**

10:1/4:1 gun

6345

**ExperTemp Mixing Tips 45pk**

6346

**ExperTemp A1 Kit**

6341

**ExperTemp A2 Kit**

6340

**ExperTemp A3 Kit**

6347

**ExperTemp A3.5 Kit**

6342

**ExperTemp B1 Kit**

6343

**ExperTemp BW Kit**

1 x 50 ml cartridge 15 x Mixing tips

6344

*Trademark of a company other than Ultradent.

Case Study: Vit-l-escence

Vit-l-escence
Ultradent Composite
Gun Composite Wetting
Resin PermaFlo Pink
PermaFlo
Uveneer

Wade Smith
Timpanogos, Utah
Vit-l-escence®
ESTHETIC RESTORATIVE MATERIAL

- Effortlessly blends with natural dentin and enamel
- Intended for anterior and posterior restorations
- Is both creamy and sculptable
- Polishes beautifully
- Matches shade guide perfectly

Vit-l-escence esthetic restorative material is a composite system that features the fluorescent and opalescent qualities of natural tooth structure. It is a Bis-GMA-based, radiopaque microhybrid system with an average particle size of 0.7 μm.* The all-composite shade guide contains uniquely shaped tabs to assist in the most refined layering and shade selection possible. Low-translucency, highly fluorescent dentin shades combined with high-translucency, opalescent/translucent enamel shades facilitate superior reproduction of natural teeth.

Vit-l-escence esthetic restorative material is ideal for creating artistic anterior composite restorations, including direct veneers. Its strength and wear resistance also make it perfect for posterior restorations.

“As a 30-year vet of trying to make anterior restorations look like teeth and having tried all the ‘latest and greatest’ new composites over this time, I have found Vit-l-escence material to be the only composite with which I can predictably achieve my goal.”
—DR. CLARENCE TAM – AUCKLAND, NEW ZEALAND

“The ability to match various shades and nuances of natural teeth has given me the tools to produce results I would not have believed possible. This product alone raised my skill level at least two notches higher.”
—DR. HARPER JONES II – PENDLETON, OR

“Just the right amount of translucency and pearliness allows invisible blending on enamel margins for posterior restorations. Combined with the easy handling and finishability of your Vit-l-escence products, these shades are truly ‘pearl’ precious and beautiful.”
—DR. MARYANN PITTMAN – SAINT PETERSBURG, FL

“With Vit-l-escence material, I can do Class IV restorations that are indistinguishable from natural teeth. What a great product!”
—DR. SARAH BALSER – COLUMBUS, OH

*Dependent on modality for particle size measurement. 1, realityesthetics.com.
VIT-L-ESCENCE LAYERING TECHNIQUE

1. For Class IV restorations, veneers, or diastema closures. A silicon putty matrix fabricated from diagnostic wax-up is recommended.

2. Use matrix as a guide for basic shape of restoration and to support initial lingual placement of material.

3. Use thin layer of Pearl Neutral to establish lingual contour. This is not necessary if tooth structure exists on lingual wall.

4. Inner dentin body layer includes basic hue of exposed dentin. A3.5 is applied at cervical towards incisal. Create mamelons using a carver.

5. Cover body and extend enamel edge with appropriate translucent shade. To achieve a “halo” (white line at the incisal edge), place thin roll of Pearl Frost or Opaque Snow.


**NATURAL ENAMEL OPALESCENCE AND DENTIN FLUORESCENCE**

**VIT-L-ESCENCE ENAMEL**

**Traditional Composite**

**Natural Tooth**

**VIT-L-ESCENCE DENTIN SHADE**

In a simple technique, Vit-l-escence® esthetic restorative material allows you to layer enamel shades over dentin shades, creating the most lifelike restorations possible.

**Glossary of Terms:**

- **Hue:** The wavelength of reflected light as determined by the dentin shade. The individual color of the tooth.
- **Shade:** The variance in hue due to the introduction of lighter or darker colors.
- **Chroma:** The level of saturation, or the intensity of the hue.
- **Value:** The lightness or darkness of the tooth.
- **Translucency:** The ability of a tooth to permit the passage of light.
- **Opacity:** The ability of a tooth to block the passage of light.

**SELECT HUE**

Identify the hue of the gingival third of the tooth and choose the best dentin shade accordingly.

**ESTABLISH CHROMA**

Identify the level of saturation of the middle third of the tooth. This may be the same dentin shade determining hue or could be an additional 1 or 2 dentin shades.

**DETERMINE VALUE**

Use a value-difference guide to identify the value of the tooth. Accurately replicating the value defines form and creates realistic spatial perceptions.

**IDENTIFY TRANSLUCENCY**

Translucency is typically seen at the incisal edge. Helioscent Blue reflects light in the yellow to blue range, adding dimension.

**IDENTIFY UNIQUE OPAQUES AREAS**

Replicate very bright, high-value areas such as hypocalcifications, decalcifications, stains, etc. Opaque shades can also be used for modeling or fabricating out a dentin or enamel. Opaque White is the most opaque and has the highest value.
5016 Vit-l-escence Essentials Kit—9 Shades  
1 x Each 2.5 g Vit-l-escence dentin shade  
A1, A2, A3, and B1 syringe  
1 x Each 2.5 g Vit-l-escence enamel shade  
Opaque Snow, Pearl Frost, Pearl Neutral, Trans Mist, and Iridescent Blue syringe  
1 x Each 1.2 ml Permaflo A4 and Translucent syringe  
1 x Essentials shade guide  
1 x Half-size syringe organizer  
1 x Quad key  
20 x Micro 20 ga tips

Optional KleenSleeve™ QuadraSpense™

Quad Key
Use to remove the white quad flanges on the Vit-l-escence syringe to create an open-bore delivery barrel if desired.

Vit-l-escence Syringes 2.5 g 1pk

<table>
<thead>
<tr>
<th>Dentine</th>
<th>Enamel</th>
<th>1pk</th>
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<tbody>
<tr>
<td>A1</td>
<td>Opaque White™</td>
<td>358</td>
</tr>
<tr>
<td>A2</td>
<td>Opaque Snow™</td>
<td>344</td>
</tr>
<tr>
<td>A3</td>
<td>Pearl Frost™</td>
<td>356</td>
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<tr>
<td>A3.5</td>
<td>Pearl Neutral™</td>
<td>360</td>
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<tr>
<td>A4</td>
<td>Pearl Amber™</td>
<td>365</td>
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<td>A5</td>
<td>Pearl Smoke™</td>
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<td>A6</td>
<td>Trans Frost™</td>
<td>409</td>
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<tr>
<td>B1</td>
<td>Trans Mist™</td>
<td>418</td>
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<td>B2</td>
<td>Trans Smoke™</td>
<td>421</td>
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<tr>
<td>B3</td>
<td>Trans Blue™</td>
<td>422</td>
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<tr>
<td>B4</td>
<td>Trans Orange™</td>
<td>423</td>
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<tr>
<td>B5</td>
<td>Trans Gray™</td>
<td>426</td>
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<tr>
<td>C1</td>
<td>Trans Ice™</td>
<td>435</td>
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<tr>
<td>C2</td>
<td>Trans Yellow™</td>
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<tr>
<td>C5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3</td>
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</tbody>
</table>

3080 Composite Quad Key 1pk

822 Master’s Shade Guide—24 Shades  
A1, A2, A3, A3.5, A4, A5, B1, B2, OW, OS, PF, PN, PA, PS, TF, TM, TS, TB, TO, TG, TI, TY, TA, IB
**Ultradent® Composite Gun**

- Ergonomic
- Autoclavable
- Drop ‘n’ lock feature makes it easy to load
- Use with all prefilled and empty compules on the market

**Ultradent Composite Gun 1pk**

**Composite Wetting Resin**

- Facilitates composite adaptation
- Moistens dry composite during contouring
- Hydrophobic and solvent free resin

Composite Wetting Resin is a 45%-filled, light-cured, liquid resin. It is significantly superior to single-component adhesives, which contain solvents and inhibit composite polymerization.

Use Composite Wetting Resin during incremental layering of composite materials. We recommend it be used when the oxygen-inhibited layer has been removed or disturbed (e.g., washing the composite surface following contamination). Composite Wetting Resin may be placed on the composite surface if it has become dry during contouring. Use Composite Wetting Resin on an instrument or brush to enhance glide. Composite Wetting Resin greatly facilitates adaptation of the composite restoration and preparation.

“I use Composite Wetting Resin instead of a bonding agent to facilitate adaptation of composite. Bonding agents often contain acetone or alcohol that can cause the resins and fillers in the composite to separate, which weakens the surface of the restoration. They also may change the composite’s shade after curing.”

—DR. JAIMEÉ MORGAN – SALT LAKE CITY, UT

**PermaFlo® Pink**

- Acts as an attractive solution for esthetic gingival substitute

PermaFlo Pink composite is an excellent alternative to gingival grafting, which is not always an option. Use as a masking agent in Class V restorations where root structure is exposed. Also use to mask gingival recession.

PermaFlo Pink Syringe Kit

- 2 x 1.2 ml syringes
- 4 x Micro 20 ga tips

1. Following tooth prep and application of Peak® Universal Bond adhesive, build restoration incrementally with PermaFlo Pink composite.

2. Final restoration can mask exposed root surfaces when gingival grafting isn’t an option.

**PermaFlo Pink Syringe Kit**

1. realityesthetics.com
PermaFlo® Flowable Composite

- High-fill, high-flow formula
- Highly radiopaque
- Fluoride-releasing formulation
- Superior polishability
- Strong and wear resistant
- Available in 8 shades

PermaFlo flowable composite is light-cured, radiopaque, methacrylate-based, and available in 8 shades. Its thixotropic properties impart ideal flowability for improved adaptation. PermaFlo composite is 68% filled by weight, with an average particle size of 0.7 μm and a low film thickness.

Use PermaFlo flowable composite for anterior and posterior restorations: Class I, II, III, IV, and V. It can also be used to restore missing subgingival tooth structure prior to endodontic procedures (the “Donut Technique”).

<table>
<thead>
<tr>
<th>PermaFlo® Composite</th>
<th>Film Thickness ( \mu m )</th>
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<tbody>
<tr>
<td>PermaFlo® Composite</td>
<td>5.80 ( \mu m )</td>
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<tr>
<td>AELITEFLO™</td>
<td>17.4 ( \mu m )</td>
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<tr>
<td>Revolution™</td>
<td>14.2 ( \mu m )</td>
</tr>
<tr>
<td>Flow It™</td>
<td>18.0 ( \mu m )</td>
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</tbody>
</table>

PermaFlo composite exhibits very low film thickness.

<table>
<thead>
<tr>
<th>PermaFlo® Composite</th>
<th>Compressive Strength MPa</th>
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<tbody>
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<td>PermaFlo® Composite</td>
<td>363.16</td>
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<tr>
<td>AELITEFLO™</td>
<td>394.18</td>
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<tr>
<td>Revolution™</td>
<td>326.53</td>
</tr>
<tr>
<td>Flow It™</td>
<td>384.32</td>
</tr>
</tbody>
</table>

PermaFlo composite performs favorably with other flowable composites. Being 68% filled, it provides very high compressive strength.

MICRO RESTORATIVE


2. The flowable composite offers unsurpassed adaptation as it fills from preparation floor up.

3. Finished, radiopaque, 0.7 \( \mu m \) hybrid restoration. Ultimate restorative seal!

MASKER

- Masking dark colors with PermaFlo composite initially facilitates gorgeous esthetics at surface.

METAL MASKING

- Place a thin layer of PermaFlo® Dentin Opaque over exposed metal and light cure for 10 seconds on standard mode with VALO® curing light. For curing lights with output <800 mW/cm², cure 20 seconds.

SUPERADAPTIVE INITIAL LAYER

- After bonding agent, apply a thin layer of PermaFlo composite at gingival margin, proximal box axial margins, and internal line angles to ensure quality adaptation of composite.
**PEDIATRIC RESTORATIONS**

1. Rampant caries in a 3-year-old.

2. Slow speed and large round bur to remove all caries. Verify with Sable™ Seek™ caries indicator to ensure prep is in firm mineral dentin. Quality tissue management is an absolute here; pack an Ultrapak® cord soaked in hemostatic agent first.

3. Etch preparations and apply Peak® Universal Bond adhesive. Light cure for 10 seconds on standard mode with VALO curing light. For curing lights with output <600 mW/cm², cure 20 seconds. Apply a thin first layer of PermaFlo composite to the adhesive layer with Micro 20 ga tip. Light cure.

4. Apply and cure 1 or 2 additional increments. Quickly finish restorations with finishing burs and abrasive cups.

5. One year later.

—DR. IAN E. MODESTOW – FLORENCE, MA

“PermaFlo composite allows us to restore in so many different situations. The material seems to ‘flex’ better in those difficult Class V restorations, which serves us and our patients more successfully.”

—DR. PAT PRENDERGAST – ENGLEWOOD, CO

“I literally use PermaFlo composite on every patient. I love the shades and the way it flows and handles. I use it around my posts, prior to core buildups. The stuff is awesome!”

—DR. KENNETH B. ALLEN – FORT COLLINS, CO

“The opaque PermaFlo composite shade is a terrific tool for difficult esthetic restorations. It allows me to mask metal when repairing a PFM crown and eliminates the gray hue. I am able to cover dark stains and restore the tooth to its natural beautiful shade.”

—DR. PAT PRENDERGAST – ENGLEWOOD, CO

**FLOW DISTANCE**

- **HIGH FILL!**
- **HIGH FLOW!**

**PERMAFLO UNIVERSAL KIT**

- 1 x Each 1.2 ml PermaFlo A1, A2, A3, A3.5, A4, B1, Dentin Opaquer, and Translucent syringe
- 1 x 1.2 ml Peak Universal Bond syringe
- 1 x 1.2 ml Ultra-Etch syringe
- 1 x Half-size syringe organizer
- 1 x Shade guide
- 6 x Inspiral Brush tips
- 20 x Black Mini tips
- 20 x Micro 20 ga tips

**PERMAFLO A1 KIT**

**PERMAFLO A2 KIT**

**PERMAFLO A3 KIT**

**PERMAFLO A3.5 KIT**

**PERMAFLO A4 KIT**

**PERMAFLO B1 KIT**

**PERMAFLO TRANSLUCENT KIT**

**PERMAFLO DENTIN OPAQUER KIT**

ultradent.com/au
Uveneer direct composite template system is a unique, minimally invasive template system that creates beautiful direct composite veneers with predictable shape and symmetry. It mimics natural dentition and is designed to create high-quality, natural-looking anterior restorations in one visit. It can also be used for cosmetic mock-ups and shade selection as well as temporaries during porcelain veneer creation.

Each reusable, autoclavable template is designed to mimic ideal tooth anatomy according to the rules of smile design and the “golden proportion.” The system incorporates ideal height to width ratio, contour, embrasure, and center midline. Due to the precise anatomical facial tooth contour of the templates, the final result will yield different thicknesses of composite. The composite will be thinner toward the incisal third and gingival areas and will be thicker toward the middle of the facial surface. Because this varied thickness creates different effects and values, only one shade of composite is needed to achieve a natural gradient effect. However, multiple shades of composite can still be used depending on the clinician’s preferred technique.

“Terrific tool to quickly and easily create beautiful anterior restorations.”
—DR. GARY M. RADOV, DDS

“The Uveneer template makes the practice of the anterior esthetic dentistry easier, faster, and better.”
—DR. GEORGE FREEDMAN, DDS

“The simplicity of the Uveneer template is absolutely remarkable. Why didn’t I think of this?”
—DR. JOHN C. COMISI, DDS, MAGD

“In a single day I was able to do 11 mock-up veneers that were not part of the original schedule, resulting in several new cases being accepted. I wouldn’t want to work without them now.”
—DR. CHAD WAGENER, DDS

**UVKV3 Uveneer Kit**

*16 x Medium upper and lower arch templates*
*16 x Large upper and lower arch templates*

Medium and large templates provide 2 central incisors, 2 lateral incisors, 2 canines, and 2 premolar templates for both the upper and lower arches.
CASE STUDY

Naturomimetic Rejuvenation of Cracked, Chromatic Central Incisors using Direct Trilaminar Resin Veneers

ABOUT THE DENTIST

Dr. Clarence Tam is originally from Toronto, Canada, where she completed her Doctor of Dental Surgery and General Practice Residency at the University of Western Ontario and the University of Toronto, respectively. Clarence’s practice is mostly limited to cosmetic and restorative dentistry. She is well-published to both the local and international dental press, writing articles, reviewing and developing prototype products and techniques in clinical dentistry. She frequently and continually lectures internationally.

Dr. Clarence Tam is the Chairperson and Director of the New Zealand Academy of Cosmetic Dentistry. She is the first and only to hold Board-Certified Accredited Member Status with the American Academy of Cosmetic Dentistry in Australasia.
A 26 year old healthy female presented to my service for esthetic correction of visual defects that affected her confidence in teeth #8 and 9. Specifically, both horizontal and axial enamel-dentin craze lines or folds unrelated to past sharp dental trauma were salient in the incisal 1/3rd of both teeth, extending into the superficial dentin. Additionally, there was a notable splash of chroma affecting the mesioincisofacial aspect of tooth #9 with moderate chromatic intensification affecting the incisal 2/3rds of both central incisors relative to her Social Six. Hypomineralized streaks and clouds were observed maverick effects in the color map. The visual appearance of the teeth affected her social and professional confidence in interaction, and a minimally-invasive solution was sought. Options were discussed including preprosthetic tooth whitening and resin infiltration, with the patient understanding that even following custom nightguard whitening and resin infiltration that any residual folds would still need some conservative resin bonding to perfect the surface.

The patient was compliant and completed the custom nightguard bleaching process over a period of just over one month, improving from a baseline shade of Vita 4M2/4R1.5 to Vita 1M1 (upper centrals), 0M3 (lower centrals) and 2M1 (upper laterals). The chromatic splashes still were notable in the teeth and the patient wished to have a uniform looking tooth with esthetics cohesive with the rest of the arch.

Prosthetic bonding options were discussed including minimal preparation feldspathic porcelain veneers, lithium disilicate veneers and composite veneers. The patient elected to proceed with composite veneers for the reasons of cost effectiveness and predictability of intraoral reparations in the event of chipping or staining.
Following necessary restorative procedures to eliminate caries and replace defective posterior restorations, the patient followed a bleaching protocol where a custom nightguard was fabricated for both maxillary and mandibular arches featuring a 2mm gingival margin overlap with cervical model troughing to ensure a hermetic seal for retention of the 10% carbamide peroxide (Opalescence). The patient whitened overnight for 6 weeks, attaining a remarkable lift in value of all her teeth, eliminating most of the unsightly chroma in the incisal 2/3rds of tooth #8 and 9. Residual chroma affected the mesioincisofacial aspect of #8 and the enamel folds were still visible.

PROCEDURE

Tooth 8 and 9 were isolated using a serrated metal strip, and subjected to a total etch technique with 35% orthophosphoric acid (UltraEtch, Ultradent) followed by a scrubbing application of 3 coats of adhesive (Peak Universal Bond, Ultradent) prior to air thinning and curing with an output of 1200mw/cm² (Valo, Ultradent).

(Non-Latex, Sanctuary Dams), a composite veneer preparation was undertaken using a Mani TF-25F diamond bur to a depth of 0.3mm cervicofacially and 0.5mm proximofacially and in the facial 2/3rds. As a relative reference, Ed McLaren reports that each desired shade change utilizing porcelain veneers requires 0.2-0.3mm (1). Extrapolating from this, this case desired to eliminate A3 chromatic detail A3 range with a desired A1 target shade, which would require a 0.4-0.6mm reduction. Crevicular fluid was controlled via packing of a #00 braided retraction cord (Ultrapak, Ultradent) on the facial aspect prior to micro air abrasion with 27 micron aluminum oxide powder (Prep Start, Danville).

Following local anesthesia and split rubber dam isolation. Filling the color map was recorded in the fully-hydrated state prior to the operative procedure and the corresponding candidate composite shades were chosen via the shade button technique. Tooth 8 and 9 were isolated using a serrated metal strip, and subjected to a total etch technique with 35% orthophosphoric acid (UltraEtch, Ultradent) followed by a scrubbing application of 3 coats of adhesive (Peak Universal Bond, Ultradent) prior to air thinning and curing with an output of 1200mw/cm² (Valo, Ultradent).
PROCEDURE

The final enamel volume was replaced using an achromatic enamel resin (Pearl Neutral, Vit-l-escence).

An area of incisal translucency and opalescent character was applied to the area of incisal dentin irregularity using Vit-l-escence irB and burnished seamlessly into the region.

As streaks and clouds of hypomineralization was desired, visual reference was made to the fully hydrated photograph to ascertain the location and concentration of white intensive application (Final Touch, Voco).

The dentin volume was replaced using Vit-l-escence A1 (Ultradent) and the dentin lobule anatomy characterized using the TNTAM1 instrument (SkoolToolz, Hu-Friedy, Chicago).

Primary anatomy was defined using an extra-coarse Sof-Lex Disc (3M).

Secondary anatomy was defined using the Mani TC-11F, FO-30F and TR-26F before final polishing using the Double Diamond D-Fine Series (Clinicians Choice) and Diamond Polish Paste (0.5 micron, Ultradent) with a Flexibuff disc (Cosmedent, Chicago).
The composite selected for this case is a microhybrid composite with particle size averaging 700nm. The respective enamel and dentin shades are characterized much as they are in nature, with the highly-polishable enamel being achromatic, opalescent and translucent. The dentin shade functions as being both fluorescent and responsible for the primary color or hue of the tooth leaving the final chroma and value of the tooth to be modulated via the thickness of the achromatic enamel layer. Vit-l-escence is one of the godfathers of esthetic composite resin with a time-tested functional and optical chemistry that allows the clinician ultimate control in the delivery of predictable esthetics.

**PRODUCTS USED**

- Vit-l-escence
- Peak Universal Bond
- VALO
- Ultrapak
- Ultra-Etch
- Opalescence
- Diamond Polish

EASY TO MIX. EASY TO DELIVER.

MTAFlow mineral trioxide aggregate repair cement is designed to mix quickly, smoothly, and easily into the right consistency for a variety of procedures. Plus, it can be delivered using Ultradent’s syringes and tips, ensuring precise placement for effective treatment.

See Page 29
Irrigation Protocol
EndoREZ Points
Endo-Eze Ruler
Absorbent Paper Points
Skin Syringe
MTAFlow
NaviTip Tips
EndoREZ Canal Sealer
EndoREZ Accelerator
DermaDam
Luer Vacuum Adapter
ChlorCid
ChlorCid V
File-Eze EDTA Lubricant
Ultradent EDTA 18%
Solution Consepsis
Consepsis V
UltraCal XS
Ultradent Citric Acid 20%
PermaFlo Purple
NaviTip Reference Guide
TECHNIQUE GUIDE FOR
IRRIGATION PROTOCOL

RECOMMENDED IRRIGATION PROTOCOL

1. Establish Patency:
   • Fill canal with ChlorCid® V (NaOCl) solution and place a small amount of File-Eze® EDTA lubricant
   • Scout canal with a #10 or #15 SS K–file until the temporary working length and irrigate with 3–5 ml of ChlorCid® solution

2. Preflaring:
   • Fill canal with ChlorCid V solution and use orifice shaper in the straight part of canal
   • Irrigate with 3–5 ml of ChlorCid solution

3. Glide Path:
   • Fill canal with ChlorCid V solution and create a glide path with a #15 or #20 SS K–file until working length
   • Irrigate with 3–5 ml of ChlorCid solution

4. Instrumentation:
   • Fill canal with ChlorCid V solution, then start instrumentation
   • Irrigate with 3–5 ml of ChlorCid solution between each file
   • Finish irrigation with 3–5 ml of ChlorCid solution
   • Fill canal with EDTA, leave 60 seconds, and evacuate

5. Optional Step:
   • Rinse canal with sterile water, and soak canal for 5 minutes with Consepsis® (CHX) solution
   • Evacuate canal and dry; do not rinse

DO NOT mix Chlorhexidine and NaOCl due to toxic chemical formation.
NaviTip® Delivery Tips

When it comes to root canals, Ultradent is with you every step of the way.

Don’t Change Your Technique. Make It Easier with NaviTip Tips.

Ultradent’s NaviTip tips provide the optimal delivery for every step in a root canal procedure. Unlike traditional irrigation tips, the cannula of each NaviTip tip is slightly rigid through the base and center, but flexible at the tip to allow for easy navigation of curved canals.

Simplify Any Procedure

Use NaviTip tips to deliver any endodontic irrigant directly where it’s needed—just short of the apex.

See Page 101
EndoREZ® Points
RESIN-COATED GUTTA PERCHA POINTS

- The ONLY resin-coated gutta percha
- Chemically bonds to EndoREZ canal sealer and other resin-based sealers

EndoREZ Points are standard ISO-sized gutta percha points coated with a thin resin coating, which bonds chemically to EndoREZ canal sealer. They are the first gutta percha points to achieve a chemical bond with the sealer, providing a more effective seal than traditional gutta percha.

GUTTA PERCHA SEM

Tip Size | .02 120pk | .04 60pk | .06 60pk
--- | --- | --- | ---
15 | --- | 1838 | ---
20 | --- | 1839 | ---
25 | 1631 | 1634 | 1637
30 | 1632 | 1635 | 1638
35 | 1633 | 1636 | 1639
40 | 1675 | 1707 | ---
15–40 | 3355 | 3357 | 3359
45–80 | 3356 | --- | ---

3358 Variety Medium Medium Fine/ Medium Fine 100pk

Endo-Eze™ Ruler

Absorbent Paper Points

- Sterile
- Color coded
- Highly absorbent
- 28 mm length

Ultradent’s paper points quickly and efficiently absorb liquid from the canal and are sold in packs of 200 for a cost-effective solution. For a more efficient way to dry canals, use Ultradent’s Luer Vacuum Adapter.

Tip Size | 200pk
--- | ---
20 | 1560
25 | 1554
30 | 1555
35 | 1556
40 | 1557
45 | 1558
50 | 1559

Skini Syringe

In dentistry, air often gets in the way of the materials used in canals. Displacing that air is essential for achieving a predictable seal and completely filling the canal preparation. The EndoREZ delivery system is optimized to displace air and create the highest seal possible by delivering materials from the bottom of the canal up, achieving bubble-free and complete application.

Transfer EndoREZ® canal sealer out of dual barrel syringe into back of a Skini syringe using mixing tip. Fill syringe to back flange so no air remains between plunger and EndoREZ canal sealer. Attach a 29 ga Navitip® tip of the appropriate length. Express a small amount of EndoREZ canal sealer extrorally to verify flow. Make sure tip end is not bound in the apical region before expressing sealer.

1680 Skini Syringe 20pk
1681 Skini Syringe 50pk
MTAFlow™ cement has a smooth consistency due to the ultrafine powder and proprietary gel medium. The formulation is resistant to washout, which helps to ensure that the mixture stays right where you place it.

1. Use a cement spatula to remove excess powder. **DO NOT** use powder without leveling at edge of scoop.
2. Shake from top to bottom 3 times. Make sure that gel is in tip end of bottle before expressing.
3. After mixing, insert mixed MTAFlow cement into back of clear Skini syringe.
4. Reinsert plunger and express a small amount of material through tip.
5. Mixed MTAFlow cement inside syringe will be usable for up to 15 minutes.
6. Use thin consistency and a NaviTip® 29 ga tip to deliver MTAFlow cement inside canal.

**THE DIFFERENCE YOU CAN FEEL**

MTAFlow® cement is designed to mix quickly, smoothly, and easily into the right consistency for a variety of procedures. MTAFlow cement has a smooth consistency due to the ultrafine-grained powder and proprietary gel medium. The formulation increases resistance, which helps to ensure that the mixture stays right where you place it. Plus, it can be delivered using Ultradent’s syringes and tips, ensuring precise placement for effective treatment.

“MTA cement is a bioactive material. The formation of hydroxyapatite (HA) will cover the surface of the MTA exposed to body fluids, and that layer of HA will no longer look like a foreign material to the living cells. Therefore, the MTA will support healing.”

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THE RIGHT CONSISTENCY FOR THE RIGHT PROCEDURE
The mixing ratio of the powder and gel components of MTAFlow™ cement is adaptable based on the procedure. Use a thick consistency for pulp capping, pulp chamber perforation, and pulpotomy; a thin consistency for resorption, apexification, and apical plug; or a putty consistency for root end filling.

Whatever consistency you need, you can be sure MTAFlow cement will be effective, non-gritty, and easy to deliver accurately. More gel or powder may be added at any time during mixing to achieve the desired consistency.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Pulp Capping, Pulp Chamber Perforation, Pulpotomy</th>
<th>Resorption, Apexification, Apical Plug</th>
<th>Root End Filling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powder (Measuring Spoon)</td>
<td>2 big ends (0.26 g)</td>
<td>1 big end plus 1 small end (0.19 g)</td>
<td>1 big end plus 1 small end (0.19 g)</td>
</tr>
<tr>
<td>Gel Drops</td>
<td>2 drops</td>
<td>3 drops</td>
<td>1 drop**</td>
</tr>
<tr>
<td>Consistency</td>
<td>Thick</td>
<td>Thin</td>
<td>Putty</td>
</tr>
<tr>
<td>Deliver</td>
<td>Micro 20 ga tip</td>
<td>NaviTip 29 ga tip</td>
<td>Non-syringe delivery</td>
</tr>
</tbody>
</table>

* More powder or gel can be added to achieve desired consistency.
** Depends on the desired consistency

EVERYTHING YOU NEED IN ONE PLACE
The MTAFlow™ kit comes with the essential tools you’ll need to mix and deliver cement. The kit contains enough MTA powder and gel to complete 8–10 applications.

3980-1 Endo-Eze MTA Flow Repair Cement Kit
1x technique guide, 1x IFU, 1x MTAFlow Powder (2g), 1x MTAFlow Gel (2ml), 1x measuring spoon, 1x mixing pad, 20x Black Micro Tips, 10x skin syringes, 10x luer lock caps

3981 Endo-Eze MTA Flow Repair Cement Refill Kit
1 x MTAFlow Powder (2g), 1 x MTA Flow Gel (2ml), 1 x Measuring Spoon, 1 x Mixing Pad, 1 x Technique guide, 1 x IFU

NaviTip® Tips
With the NaviTip® tips you will have controlled delivery anywhere in the canal. The flexible cannulas and rounded tip easily navigate curved canals.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>mm</th>
<th>20pk</th>
<th>50pk</th>
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<tr>
<td>NaviTip 29 ga Green</td>
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<td>NaviTip 29 ga Blue</td>
<td>25 mm</td>
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<td>NaviTip 29 ga Yellow</td>
<td>21 mm</td>
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<td>NaviTip 29 ga Green–White</td>
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<table>
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<tbody>
<tr>
<td>NaviTip 30 ga Green</td>
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<td>NaviTip 30 ga Blue</td>
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<td>1250</td>
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<td>NaviTip 30 ga Yellow</td>
<td>21 mm</td>
<td>1349</td>
<td>1422</td>
</tr>
<tr>
<td>NaviTip 30 ga White</td>
<td>17 mm</td>
<td>1249</td>
<td>1421</td>
</tr>
<tr>
<td>NaviTip 30 ga Green–White</td>
<td>27mm–17mm</td>
<td>1351</td>
<td>3319</td>
</tr>
</tbody>
</table>
EndoREZ®
CANAL SEALER

EndoREZ canal sealer minimizes the amount of chair time required for obturation. This thixotropic material has an affinity for the moisture found deep in dentinal tubules and lateral canals and provides the most complete seal available. Since methacrylate-based EndoREZ canal sealer relies on chemistry rather than heat or pressure to fill the canal, the risk of additional root trauma/fracture is greatly reduced. Additionally, studies show that EndoREZ canal sealer is versatile enough to be used as the sealer with any obturation method, e.g., master cone, lateral condensation, or warm gutta percha. Create a “monobloc” by using EndoREZ resin-coated gutta percha points.

EndoREZ canal sealer contains a special hydrophilic organophosphate methacrylate monomer that increases its hydrophilicity and produces a resin with a strong affinity for moisture with resin penetration of 1200µ into tubules.

EndoREZ canal sealer penetrates into tubules and adapts to the walls like no other sealer on the market.

EndoREZ canal sealer results in predictable fills that are radiopaque, easily diagnosed, and suitable for retreatment and post-and-core procedures.

The improved flowability of EndoREZ canal sealer allows the sealer to reach the isthmus and intracanal areas during the obturation procedure without using any special device.

Cases of incomplete formation of apex or reabsorbed foramen can be treated in one visit with an apical MTAFlow cement plug. This will prevent the extrusion of the EndoREZ canal sealer and create a biological seal at apical foramen.
ENDOREZ CANAL SEALER SEQUENCE OF CLINICAL USE

Fit an EndoREZ® gutta percha point to working length. Verify radiographically.

Remove moisture from canal space using Capillary tip and Ultradent® Luer Vacuum Adapter, followed by a paper point (paper point should be damp 1–3 mm at tip). Canal should be damp, not desiccated, prior to obturating with hydrophilic EndoREZ sealer. Deliver hydrophilic EndoREZ sealer using a NavTip® tip 29 ga, inserting the tip 2–4 mm short of working length.

Express EndoREZ canal sealer with light pressure into canal while withdrawing tip. Keep the NavTip tip orifice buried in material while expressing EndoREZ canal sealer and withdrawing tip.

Slowly insert master EndoREZ gutta percha point cone or Genius gutta percha to working length. Be sure to use a single gentle movement toward apical area. Avoid using a "pump" movement with cone. Passive or cold lateral compactions can be used. Without using accelerator, EndoREZ canal sealer will set in about 20–30 minutes.

Light cure EndoREZ canal sealer with VALO® LED curing light for 40 seconds. Initial surface polymerization with curing light (without EndoREZ Accelerator) is less than 0.3 mm thick and aids in immediate restoration. Trim excess gutta percha with a very hot instrument or using the Ultrawave® XS PM4 tip with ultrasonification (no water). Complete restorations following obturation to properly seal canal entrance. Do not leave cotton pellets between obturation and temporary restoration.

Note: The following lubricants contain peroxides that are not compatible with EndoREZ canal sealer: EndoGel,* EndoSequence,* Glyde,* ProLube,* RC-Prep,* and SlickGel ES.*

ENDOREZ CANAL SEALER SEQUENCE OF CLINICAL USE

5900 EndoREZ Syringe Kit
1 x 5 ml EndoREZ syringe
20 x Mixing tips

EndoREZ Accelerator

EndoREZ canal sealer sets in 5–12 minutes!

- Accelerates EndoREZ sealer polymerization
- Enables post preparation in the same appointment

EndoREZ Accelerator reduces EndoREZ canal sealer set time from 30–60 minutes to about 5–12 minutes, before the commencement of post-endo restorative procedures, enabling the start of definitive post restorations right away. It is designed to work hand in hand with the groundbreaking EndoREZ canal sealer for reliable obturation and minimized chair time.

399 EndoREZ Accelerator Single Use 20pk
• Low dermatitis potential
• Strong and tear resistant
• Powder free to reduce allergic reactions

DermaDam rubber dam is made from pure latex rubber and is powder free, which reduces the possibility of latex reactions. Quality processing ensures a low content of surface proteins.

311 DermaDam Medium 0.20 mm 36pk
6" x 6" (15 cm x 15 cm)

314 DermaDam Heavy 0.25 mm 36pk
6" x 6" (15 cm x 15 cm)

DermaDam Synthetic dental dam is not made with natural rubber latex, but is designed to be just as flexible and durable as dams that are composed of natural rubber latex.

Zero sensitizing proteins

299 DermaDam Medium Synthetic 0.20 mm 20pk
6" x 6 (15 cm x 15 cm)

Ultradent® Luer Vacuum Adapter

• A great time saver for any practice
• Dries canals quickly and efficiently
• Minimizes paper point use

Slide Ultradent’s Luer Vacuum Adapter onto any chairside HVE unit to efficiently remove irrigants and debris. Compatible with any Luer tip, the Luer Vacuum Adapter saves time and minimizes the use of paper points. It can be used with Capillary tips, which have tapered, flexible cannulae that reach deep into canals for enhanced cleaning and drying.

DRIES CANALS FASTER THAN EVER

1. Irrigate canals through NaviTip® tip or NaviTip® 31 ga Double Sideport tip.
2. With Capillary tip attached to vacuum, slide tip deep into canal. Move tip in and out while vacuuming. One can usually hear and/or see solutions being removed from canal.
3. The Luer Vacuum Adapter makes it easy to see what is coming from inside the canal, easily identifying its content.
4. Insert paper points into canal to verify level of dryness.

“The Luer Vacuum Adapter eliminates the need for fumbling with paper points! And the canals seem to be much drier—we couldn’t do without it!”
—DR. JEFF ROSENTHAL – CHESTERLAND, OH

230 Luer Vacuum Adapters 10pk

1. realityesthetics.com.
ChlorCid® and ChlorCid® V
3% SODIUM HYPOCHLORITE SOLUTIONS

ChlorCid and ChlorCid V solutions contain 3% sodium hypochlorite. ChlorCid V solution is a more viscous solution for enhanced flow control and lubrication, if desired.

File-Eze® EDTA Lubricant
FILE LUBRICANT

File-Eze file lubricant is an effective 19% EDTA in a water-soluble, viscous solution for chelating, lubricating, and debriding root canal preparations.

Note: The following lubricants contain peroxides that are not compatible with EndoREZ canal sealer: EndoGel,* EndoSequence,* Glyde,* ProLube,* RC-Prep,* and SlickGel ES.*

Perfect for lubrication during engine-driven instrumentation

File-Eze Syringe Kit
4 x 1.2 ml syringes
5 x Each 30 ga NaviTip tips
17 mm, 21 mm, 25 mm, and 27 mm

File-Eze Syringe 4pk
1.2 ml syringes

File-Eze IndiSpense Syringe 1pk
30 ml syringe

File-Eze IndiSpense Syringe 1pk
30 ml syringe

*Trademark of a company other than Ultradent.

1075 File-Eze Syringe Kit
1022 File-Eze Syringe Kit (2 Pack)
297 File-Eze Syringe 4pk
682 File-Eze IndiSpense Syringe 1pk
Ultradent® EDTA 18% Solution

A root canal chelating agent that conditions/cleans through a chelation process, Ultradent EDTA 18% Solution is the irrigant of choice for smear layer removal and can be used as a final irrigant prior to obturation.

1. After canal instrumentation (no irrigants or lubricants). Smear layer intact.
2. After canal instrumentation plus sodium hypochlorite. Smear plugs still intact.
3. After canal instrumentation with both sodium hypochlorite and EDTA. Smear layer is removed. Clean, open tubules.
4. Close-up of Figure 3.

Consepsis®
2% CHLORHEXIDINE ANTIBACTERIAL SOLUTION

Consepsis antibacterial solution is recommended for procedural endodontic disinfection, as a final endodontic rinse prior to canal obturation, and prior to pulp capping. Consepsis solution should be used after smear layer removal for canal disinfection. Sodium hypochlorite and EDTA solutions should be rinsed and removed prior to using Consepsis solution.

Note: DO NOT mix Consepsis solution or any chlorhexidine solution with ChlorCid® sodium hypochlorite solution in the canal, as a harmful brown precipitate will form.

1. realityesthetics.com.

ultradent.com/au

UltraCal® XS and Citric Acid 20%

UltraCal XS calcium hydroxide paste (pH 12.5) is easily delivered with the NaviTip® tip exactly where it is needed in the canal. Its aqueous consistency and radiopaque properties make it ideal as an endodontic treatment dressing for two-appointment RCTs.

When it comes time to remove UltraCal XS paste from the canal, look no further than Ultradent® Citric Acid 20% solution, delivered with the NaviTip® FX® tip. Citric Acid 20% solution dissolves calcium hydroxide, and the small fibers attached to the NaviTip FX tip easily scrub the walls of the canal, removing any remaining calcium hydroxide as well as the smear layer.
Consepsis® V
2% CHLORHEXIDINE ANTIBACTERIAL VISCOUS SOLUTION

- Designed for endodontic cleaning purposes
- A more viscous formulation of Consepsis antibacterial solution
- Stays in place, even in maxillary canals

The viscosity of Consepsis V antibacterial viscous solution makes it the perfect antibacterial irrigant in cases where you want to have more control than a liquid will give you.

Consepsis V solution can be used in the canal in place of formocresol as an antibacterial agent and interappointment intracanal medication.

Note: In cases of emergency treatments when there isn’t enough space created to place calcium hydroxide, Consepsis V solution can be placed as the interappointment medicament. Use a NaviTip tip to express Consepsis V solution into the canal, place cotton pellet, and seal with temporary cement.

UltraCal® XS
30%–35% CALCIUM HYDROXIDE PASTE

- Radiopaque
- High pH
- Superior delivery control

UltraCal XS calcium hydroxide paste is a uniquely formulated calcium hydroxide paste that is both aqueous and radiopaque, with a high pH (12.5). It is recommended to use the larger 29 ga NaviTip tip for predictable flow, enabling direct placement. UltraCal XS paste can be thoroughly removed from the canal using Ultradent Citric Acid and a NaviTip® FX® tip.

Second-visit protocol with an interappointment intracanal medication with calcium hydroxide resulted in improved microbiological status of the root canal system when compared with a single-visit protocol.1

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2210 Consepsis V IndiSpense Syringe 1pk  
30 ml syringe

1024 UltraCal XS Syringe Kit  
2 x 1.2 ml syringes  
4 x Each 29 ga NaviTip tips

1027 UltraCal XS Syringe Kit  
4 x 1.2 ml syringes  
5 x Each 29 ga NaviTip tips  
17 mm, 21 mm, 25 mm, and 27 mm

606 UltraCal XS Syringe 4pk  
1.2 ml syringes
All of Ultradent’s irrigants, lubricants, and medicaments are compatible with methacrylate resin sealers.

### Ultradent® Citric Acid 20% Solution

- Recommended as a cleanser/conditioner of prepared root canals
- Removes mineral and smear layers
- Slightly viscous formula facilitates lubrication
- Removes calcium hydroxide paste

Ultradent Citric Acid is a mild acidic material that is effective at dissolving/cleaning calcium hydroxide from canals (e.g., UltraCal XS paste). It is also recommended as a cleanser/conditioner to remove smear layer from dentinal walls. Deliver with the NaviTip tip or the NaviTip FX tip.

### PermaFlo® Purple

PermaFlo Purple is used with an adhesive system to create an easily identified coronal seal. The purple color simplifies location of the pulp chamber floor when accessing the pulp chamber for future therapy.

1. Root canal has just been completed and cleaned of excess EndoREZ in the pulp chamber. (If significant unset EndoREZ canal sealer is exposed at canal orifice, coat with thin layer of Ultra-Blend® plus liner and light cure.) Blot or air dry. Note: If eugenol or similar-based sealers have been used, wait until set and freshen all chamber and/or preparation surfaces with diamond bur prior to bonding.


3. Apply a 1–1.5 mm-thick layer of PermaFlo Purple. Light cure 20 seconds to create an immediate “coronal seal.” When a post and/or core is prepared, the purple identifies the extent of root canal preparation and/or pulp chamber. The contrast shows the clinician the pulp chamber floor in relation to the canal orifices, minimizing risk of perforation.

Note: Apply dentin bonding agent first. Remember that eugenol-containing sealers can prevent polymerization of bonding resins. We recommend EndoREZ hydrophilic resin sealer.

### 329 Citric Acid IndiSpense Syringe 1pk
- 30 ml syringe

### 962 PermaFlo Purple Syringe Kit
- 2 x 1.2 ml syringes
- 4 x Micro 20 ga tips
• Provide controlled delivery close to the apical third
• Flexible, stainless steel cannulae easily navigate curved canals

<table>
<thead>
<tr>
<th>Product</th>
<th>Recommended Tip</th>
<th>Compatible Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>67 - ChlorCid® IndiSpense Syringe</td>
<td>31 ga</td>
<td>NaviTip® FX®</td>
</tr>
<tr>
<td>1467 - ChlorCid® V IndiSpense Syringe</td>
<td>31 ga</td>
<td>30 ga and NaviTip® FX®</td>
</tr>
<tr>
<td>682 - File-Eze® IndiSpense Syringe</td>
<td>29 or 30 ga</td>
<td>—</td>
</tr>
<tr>
<td>162 - EDTA 18% IndiSpense Syringe</td>
<td>31 ga</td>
<td>30 ga and NaviTip® FX®</td>
</tr>
<tr>
<td>687 - Consepsis® IndiSpense Syringe</td>
<td>31 ga</td>
<td>29 ga, 30 ga, and NaviTip® FX®</td>
</tr>
<tr>
<td>2210 - Consepsis® V IndiSpense Syringe</td>
<td>30 ga</td>
<td>29 ga</td>
</tr>
<tr>
<td>1027 - UltraCal® XS Kit</td>
<td>29 ga</td>
<td>—</td>
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<tr>
<td>329 - Citric Acid</td>
<td></td>
<td>NaviTip® FX®</td>
</tr>
<tr>
<td>5900 - EndoREZ® Kit</td>
<td>29 ga</td>
<td>—</td>
</tr>
<tr>
<td>3980-1 - MTAFlow™ Kit</td>
<td>29 ga</td>
<td>—</td>
</tr>
</tbody>
</table>
Back to bright

Opalescence® Endo Whitening

• 35% hydrogen peroxide
• Specifically formulated to whiten endodontically treated, discolored, non-vital teeth
• Designed for the “walking bleach” technique
• Convenient, premixed syringe delivery
Ultra-Etch
Peak SE Primer
Peak Universal Bond
Ultradent Porcelain Etch and Silane
Ultradent Porcelain Repair Kit Etch Arrest
Peak ZM Primer
Ultra-Blend plus
Consepsis
• Self-limiting\(^2\) on dentin
• Penetrates smallest fissures and won’t run on a vertical surface
• Precise placement
• Rinses cleanly—leaves no residue

Ultra-Etch etchant 35% phosphoric acid solution features ideal viscosity, facilitates precise placement and superior control. It is self-limiting in its depth of etch (average depth of 1.9 \(\mu\)m with 15-second etch),\(^2\) creating an etch pattern that adhesives can penetrate for increased bond strength. Studies demonstrate Ultra-Etch etchant’s unique self-limiting chemistry on dentin creates an optimal surface to receive resin.\(^3\) Though Ultra-Etch etchant is viscous, it can penetrate into the smallest fissures or occlusal surfaces due to physical and chemical properties that promote capillary action. Its ideal viscosity maintains a layer that is thick enough to prevent premature drying.

Ultra-Etch etchant is indicated for use on dentin and enamel to create optimal bonding surfaces. It can also be used to remove contaminants from composite or porcelain prior to bonding.

Note: Do not use phosphoric etchant on metals or zirconia, as this will reduce bond strength.

Clinical experience and SEM evaluations\(^3\) show that 15 seconds etch time on both dentin and enamel provides optimal conditioning of both substrates.

“For a procedure as fine tuned and finicky as adhesive bonding, Ultra-Etch offers me unparalleled control in an easy-to-extrude, non-drip yet easy to disperse formula that allows precise placement and coating of the substrate whether you are working with a total etch or selective etch technique. It is the benchmark phosphoric etch on the market.”

—DR. CLARENCE TAM – AUCKLAND, NEW ZEALAND

Listed as a “CAN’T LIVE WITHOUT” product by a prominent independent research institute for more than 20 years.\(^4\)

Listed as a “TRIED & TRUE” product.\(^5\)
Peak® SE Primer
SELF-ETCHING PRIMER

- Top-rated bond strengths by an independent non-profit dental education and product testing institute2
- Delivers fresh, stable chemistry
- Easy, one-coat technique
- Precise and convenient application
- Eliminates the need for mixing wells or brushes

Peak SE Primer is a self-etching primer mixed and delivered in the unique JetMix™ syringe. JetMix technology separates precise quantities of strong acid (pH 1.2) and optimized priming resin to prevent the hydrolytic breakdown and degradation that occurs with other self-etch chemistries. Components are kept separate until the clinician activates them. Peak SE Primer is used prior to Peak Universal Bond to achieve unsurpassed bond strengths. Refrigerate for optimal shelf life.

Ideal for all light-accessible bonding procedures, the Peak Self-Etch Adhesive System can also be used for immediate dentin sealing prior to impressions and temporization in order to decrease post-op and cementation sensitivity.

FOR INDIRECT BONDING

2. Thin/dry for 3 seconds.
3. Apply a puddle coat of Peak Universal Bond adhesive and scrub for 10 seconds into dentin.
4. Thin/dry for 10 seconds and light cure for 10 seconds on standard mode with VALO® curing light. For curing lights with output <600 mW/cm², cure 20 seconds.

Highest Bond Strengths to dentin and enamel!2

COMPARISON OF 3 SELF-ETCH ADHESIVE SYSTEMS, UNIVERSITY OF IOWA COLLEGE OF DENTISTRY2

SEM of cut enamel treated with Peak SE Primer. Note: the keyhole appearance of the etched enamel rods.

SEM of cut enamel treated with Clearfil® SE Bond.

SEM of cut enamel treated with Adper® Prompt L-Pop.

REFRIGERATE

4554 Peak Universal Bond Self-Etch Intro Kit
1 x 1.2 ml Peak Universal Bond syringe
1 x 1.0 ml Peak SE Primer syringe
20 x Black Mini Brush tips
20 x Inspiral Brush tips

4541 Peak Universal Bond Self-Etch Bottle Kit
1 x 4 ml Peak Universal Bond bottle
4 x 1.0 ml Peak SE Primer syringes
40 x Black Mini Brush tips
50 x Mixing Wells
50 x Micro Applicator brushes

5135 Peak SE Primer Syringe 4pk
1.0 ml syringes

Peak® Universal Bond
LIGHT-CURED ADHESIVE

- Features Ultradent’s Dyme Tech phosphate monomer blend for enhanced strength and greater versatility
- Bonds to dentin, enamel, porcelain, metal, composite, acrylic, and zirconia
- Ideal for direct and indirect bonding, as well as post and core procedures
- Works with self-etch and total-etch techniques
- Available in syringe or bottle delivery

The versatile formulation of Peak Universal Bond adhesive is ideal for direct and indirect bonding, including post and core procedures. With a 7.5% filler content and a blend of custom-synthesized phosphate monomers, its viscosity has been optimized for minimal film thickness and superior strength. It contains an ethyl alcohol solvent carrier and will cure with any dental curing light, including LEDs. Refrigerate for optimal shelf life.

**BOND STRENGTH COMPARISON**

<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Dentin</th>
<th>Enamel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Universal TE</td>
<td>71.3</td>
<td>51.7</td>
</tr>
<tr>
<td>Peak Universal SE</td>
<td>70.6</td>
<td>67.9</td>
</tr>
<tr>
<td>OptiBond*</td>
<td>45.4</td>
<td>61.9</td>
</tr>
<tr>
<td>Scelfil SE Bond*</td>
<td>48.1</td>
<td>58.5</td>
</tr>
<tr>
<td>Scotchbond Universal*</td>
<td>34.3</td>
<td></td>
</tr>
<tr>
<td>All Bond Universal*</td>
<td>31.0</td>
<td></td>
</tr>
<tr>
<td>Adhese Universal*</td>
<td>31.2</td>
<td></td>
</tr>
<tr>
<td>Prime &amp; Bond NT</td>
<td>18.6</td>
<td>47.4</td>
</tr>
<tr>
<td>Clearfil S3*</td>
<td>30.2</td>
<td></td>
</tr>
<tr>
<td>Adper Scotchbond*</td>
<td>20.1</td>
<td>26.0</td>
</tr>
</tbody>
</table>

**Internal testing**

Ultradent’s shear bond strength testing method has been adopted as a new ISO standard. Many research centers now use this method to determine accurate bond strengths.

4551 Peak Universal Bond Total-Etch Intro Kit
- 1 x 1.2 ml Peak Universal Bond syringe
- 1 x 1.2 ml Ultra-Etch syringe
- 20 x Blue Micro tips
- 20 x Inspiral Brush tips

4542 Peak Universal Bond Total-Etch Bottle Kit
- 1 x 4 ml Peak Universal Bond bottle
- 4 x 1.2 ml Ultra-Etch syringes
- 50 x Blue Micro tips
- 50 x Micro Applicator brushes

4553 Peak Universal Bond Syringe 4pk
- 1.2 ml syringes

4552 Peak Universal Bond Syringe 20pk
- 1.2 ml syringes

4553 Peak Universal Bond Bottle 1pk
- 4 ml bottle
Ultradent® Porcelain Etch and Silane

90-Second Etch—60-Second Silane

- Etch is easy to control and place
- Yields highest porcelain-to-resin bond strengths
- Silane is a single component
- Use on Feldspathic and lithium disilicate (IPS e.max) restorations

Ultradent Porcelain Etch is a viscous, buffered 9% hydrofluoric acid. Silane is a single-component solution.

Porcelain Etch is designed for intraoral or extraoral porcelain etching. Use it for in-office etching of indirect restorations, such as veneers, inlays, etc. After porcelain etching, use Ultra-Etch etchant for 5 seconds to remove porcelain salts and debris formed by hydrofluoric acid etching; then rinse to clean residual debris, producing a clean surface for bonding.

1. Diamond-cut porcelain surface.
2. Same porcelain following 90-second etch with Ultradent Porcelain Etch.
3. Porcelain Etch is delivered from Inspiral Brush tip to prepared porcelain after placement of EtchArrest barrier.
4. Ultradent® Silane is applied and dried, followed by Peak® Universal Bond adhesive.

“...my veneer cases bond securely, and the patient can feel my confidence. At the end of the appointment, I can smile along with my patient.”
—DR. TERRY BRAUN – OCALA, FL

1. Etch ceramic bonding surface with Porcelain Etch for 90 seconds, rinse, and dry.
2. Apply Ultra-Etch etchant for five seconds to remove porcelain salts and debris formed by hydrofluoric acid etching.
3. Apply a puddle coat of Silane to the inside surface of the prosthesis for 60 seconds, dry, and set aside. Do not rinse. Prosthesis now ready for luting/cementing.

405-AU Porcelain Etch Kit
2 x 1.2 ml Porcelain Etch syringes
2 x 1.2 ml Silane syringes
20 x Black Mini Brush tips
20 x Inspiral Brush tips

406-AU Porcelain Etch Syringe 2pk
1.2 ml syringes

410 Silane Syringe 2pk
1.2 ml syringes

Ultradent® Porcelain Repair Kit
ETCH, SILANE, BOND RESIN, AND FLOWABLE COMPOSITE

• Includes all necessary precomposite-placement materials
• Yields high bond strengths
• Provides quick, easy repairs without mixing

Porcelain repair procedures are becoming more common. It is financially advantageous and less invasive to repair a chipped porcelain restoration rather than replace it. The Ultradent Porcelain Repair Kit contains all the products and tips needed for composite-to-porcelain, porcelain-to-metal, and porcelain-to-porcelain repairs.

“Ultradent’s Porcelain Repair Kit gives us a good, dependable system for repairing bridges and crowns that chip or break.”
—DR. FRED WALTSDHIMDT – BOURBONNAIS, IL

“Ultradent’s Porcelain Repair Kit is the only one that works. It includes all the necessary materials and isn’t overpriced. All the products are quality.”
—DR. LLOYD B. SCHWARTZ – TROY, NY

“The Ultradent Porcelain Repair Kit actually works! I have made repairs, and patients haven’t had to come back. With other kits I have tried, the patient ends up having to come back due to refracturing.”
—DR. FELICIA CHU – ELGIN, IL

Rated excellent by a prominent independent research institute.1

1108
Ultradent Porcelain Repair Kit
1 x 1.2 ml PermaFlo Dentin Opaquer syringe
1 x 1.2 ml EtchArrest syringe
1 x 1.2 ml OpalDam syringe
1 x 1.2 ml Peak Universal Bond syringe
1 x 1.2 ml Porcelain Etch syringe
1 x 1.2 ml Ultradent Silane syringe
20 x Black Mini Brush tips
20 x Black Micro tips
20 x Micro 20 ga tips
20 x Inspiral Brush tips

STEP-BY-STEP GUIDE FOR PORCELAIN REPAIR

Note: This Quick Guide is meant only to provide an overview; it is not a substitute for instructions provided with individual products. Please carefully read instructions and warnings delivered with products before using them.

Place rubber dam if necessary, and/or cover surrounding teeth and gingival tissue with OpalDam® light-cured resin barrier using a Black Mini® tip. Light cure 10 seconds on standard mode with VALO® curing light. For curing lights with output <600 mW/cm², cure 20 seconds.

Roughen ceramic and/or metal surfaces to be repaired using a microabrasion system with 50 µm aluminum oxide particles for at least 60 seconds. Alternatively (although less effective), use a diamond bur.

Use a Black Micro® tip to place EtchArrest® neutralizer like a frame around the broken porcelain surface.

Apply Porcelain Etch with an Inspiral® Brush tip onto the broken porcelain surface.

Etch surface for 90 seconds; then suction off gel and carefully rinse with water spray. Option: Blend EtchArrest® neutralizer into etchant until the yellow color of etchant is no longer identifiable. This will neutralize the etchant and eliminate risk of acid splashes when removing the neutralized mix.

Apply Ultra-Etch etchant for 5 seconds to remove salts.

Rinse and thoroughly air dry fractured surface.

Apply Silane onto broken porcelain surface with a Black Mini Brush tip. Use Peak-ZM on metal and zirconia surfaces.

Let evaporate for 1 minute, and blow with a gentle stream of air until completely dry.

Apply Peak® Universal Bond adhesive with an Inspiral Brush tip onto fractured surfaces. Air thin gently but thoroughly.

Light cure Peak Universal Bond adhesive for 10 seconds with a VALO LED curing light. For curing lights with output <600 mW/cm², cure 20 seconds.

Cover exposed metal with a thin layer of PermaFlo® Dentin Opaquer using a Micro 20 ga tip, then light cure for 10 seconds with VALO LED curing light. For curing lights with output <600 mW/cm², cure 20 seconds.

Restore fracture by layering light-cured composite.

Finish and polish repaired area.
**EtchArrest®**
ACID BARRIER/NEUTRALIZER

- Neutralizes acid etchants upon contact
- Protects soft tissues and adjacent restorations
- Contrasts with tissues and acid etchants
- Rinses easily

When hydrofluoric acid contacts enamel during porcelain repair procedures, formation of calcium fluoride occurs, and bond strengths to enamel drop significantly. Therefore, it is vital to treat porcelain and tooth structure separately with appropriate acids. EtchArrest acid barrier/neutralizer isolates hard and soft tissues when rubber dam placement is not practical.

*1. Data on file.*

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**Peak-ZM Zirconia/Metal Primer**

- A unique blend of phosphate monomer including MDP monomer
- Convenient syringe and bottle delivery options
- Significantly enhances bond strengths to resin cements
- Strong bond strengths to zirconia, alumina, and metal restorations

Peak-ZM Zirconia/Metal primer is specifically designed to provide high adhesion between the zirconia or metal surface and the luting material. Thanks to a chemistry containing the MDP monomer, Peak-ZM primer can increase bond strengths 5 times compared to using a resin cement alone. With Peak-ZM primer, you can feel confident in your zirconia and metal restorations.

*Note: Not for use with self-adhesive resins or RMGI.*

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**EtchArrest Kit**
4 x 1.2 ml syringes
20 x Black Micro tips

**Peak-ZM Zirconia Primer Kit**
2 x 1.2 ml Peak-ZM syringes
20 x Black Mini Brush tips

**Peak-ZM Zirconia Primer Bottle 1pk**
4 ml bottle

1. realityesthetics.com.
1. Clean, rinse, and dry preparation. Verify fit of zirconia or metal prosthesis.

2. Air abrade internal surface with 50μAl₂O₃, rinse, dry, and set aside. NOTE: Contamination to the internal surface of the prosthesis will cause a decrease in bond strength. Keep area clean and free of phosphoric acid etch and saliva.

3. Clean tooth surface by applying oil and fluoride free abrasive such as Consepsis® Scrub slurry.

4. Scrub abrasive with the STARbrush® intercoronal brush to clean and remove any residual cement. Rinse and then air dry.


5a. We recommend applying Consepsis solution to the preparation. Apply Peak® SE Primer using the Black Mini® Brush tip for 20 seconds. Thin and dry with full air pressure for 3 seconds.

6. Apply Peak® Universal Bond adhesive in a scrubbing motion for 10 seconds.

7. Thin with full air pressure for 10 seconds.

8. Light cure Peak Universal Bond adhesive for 10 seconds.

9. Apply Peak-ZM primer to the air-abraded prosthesis for 3 seconds and air thin/dry using full pressure. NOTE: Do not use a zirconia primer if luting with a glass ionomer or resin-reinforced glass ionomer cement.

10. Apply a thin layer of a resin-based cement (PermaFlo® DC resin) to the prosthesis and firmly seat in place. Cure according to instructions. Remove excess cement.

Note: Use the VALO curing light with the barrier sleeves during procedure.
Ultra-Blend® plus
LINER

- Bioactive¹ liner and pulp-capping material
- Superior calcium release²
- Light curable
- Controlled, precise syringe delivery
- No mixing necessary
- Will not dissolve over time
- Radiopaque
- Highly filled

Ultra-Blend plus liner is a light-activated, radiopaque material with calcium hydroxide in a urethane dimethacrylate (UDMA) base. It’s perfect for pulp capping and will not dissolve over time. Ultra-Blend plus liner is highly filled for minimal shrinkage.

“We have been using Ultra-Blend plus liner on a daily basis. I use it primarily in deeper cavities as a liner and insulator. The syringe makes it easy to dispense the material, and it hardens quickly with the curing light. It is reliable and has adequate adhesion. I think all of Ultradent’s products are excellent.”
—DR. TERRY BRAUN – OCALA, FL

“Ultra-Blend plus liner, used with Black Micro tips, is the most efficient method for protecting pulp.”
—DR. SHELDON BORUCHOW – AUDUBN, PA

“Ultra-Blend plus liner has been working well and is easy to use compared to other products.”
—DR. SUZETTE NIKAS – CARMEL, IN

“Ultra-Blend plus liner application is easy!”
—DR. MIMI V. JOHNSON – BELLWOOD, IL

---

LIGHT-CURED MATERIAL FOR PULP CAPPING²

1. Use Ultra-Blend plus liner near pulp and for small nonhyperemic exposure. If larger exposure and/or hyperemic pulp, initiate endodontic therapy.

2. Apply Consepsis® antibacterial solution with plastic Blue Mini® Dento-Infusor® or Black Mini® brush tip for 60 seconds with gentle scrubbing action. Dry thoroughly. Do not rinse.

3. With Black Micro tip, apply Ultra-Blend plus liner to dry dentin for direct or indirect pulp caps and light cure. Minimize dentin coverage to maximize available dentin for bonding.

4. Apply Ultra-Etch® 35% phosphoric acid etchant solution for 15 seconds. Suction, rinse, and dry until damp.

5. With the Inspiral® Brush tip, apply Peak® Universal Bond, paint onto enamel and scrub into dentin for 10 seconds. Air thin at half pressure for 2–3 seconds and light cure for 10 seconds with the VALO® curing light on Standard mode. Restore with a quality composite.

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Ultra-Blend plus liner used for pulp capping.

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REFRIGERATE

415 Ultra-Blend plus Kit
2 x 1.2 ml Dentin syringes
2 x 1.2 ml Opaque White syringes
20 x Black Micro tips
20 x Black Mini tips

416 Ultra-Blend plus Dentin Syringe 4pk
417 Ultra-Blend plus Opaque White Syringe 4pk
1.2 ml syringes

Consepsis®
2% CHLORHEXIDINE ANTIBACTERIAL SOLUTION

- Provides the longest and most effective antibacterial activity
- Reduces potential for postoperative sensitivity
- Increases bond strengths with dentin bonding agents
- May ensure long-term bond strengths by inhibiting MMP action in the hybrid layers

Consepsis antibacterial solution is a 2.0% chlorhexidine gluconate solution free of emollients that interfere with bond strength.

Minimize post-op pulpitis and sensitivity by thoroughly cleaning the preparation prior to sealing and restoring. Use prior to crown cementation, luting (provisional and/or permanent), and direct restorative placement, as well as procedural endodontic cleaning. During pulp capping, acidic etchants and hemostatic agents can cause disastrous effects on the pulp. Clean with near-neutral Consepsis antibacterial solution, which can also be used to passively control nonhyperemic bleeding.

Use Consepsis antibacterial solution prior to DBA application to clean root surface with sensitive root treatment or when bonding.

Clean preparations by applying Consepsis solution. Apply with Blue Mini Dento-Infusor tip or Black Mini Brush tip.

Clean canals during endodontic procedures after sodium hypochlorite has been used.

**WHEN DO YOU USE CONSEPSIS ANTIBACTERIAL SOLUTION?**

<table>
<thead>
<tr>
<th>SELF-ETCH - Etch and no rinse</th>
<th>TOTAL-ETCH - Etch and rinse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak SE + Peak Universal Bond</td>
<td>Ultra-Etch + Peak Universal Bond</td>
</tr>
<tr>
<td>Consepsis - RECOMMENDED</td>
<td>Consepsis - RECOMMENDED</td>
</tr>
<tr>
<td>1. Peak SE</td>
<td>1. Ultra-Etch</td>
</tr>
<tr>
<td>2. Peak Universal Bond</td>
<td>2. Peak Universal Bond</td>
</tr>
</tbody>
</table>

Consepsis Kit
- 4 x 1.2 ml syringes
- 20 x Blue Mini Dento-Infusor tips
- 20 x Black Mini Brush tips

Consepsis IndiSpense Kit
- 1 x 30 ml IndiSpense syringe
- 10 x Blue Mini Dento-Infusor tips
- 10 x Black Mini Brush tips
- 20 x 1.2 ml empty syringes

Consepsis Syringe 20pk
- 1.2 ml syringe

Consepsis IndiSpense Syringe 1pk
- 30 ml syringe

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1. realityesthetics.com.
Case Study: Gemini
• 20 watts of peak super-pulsed power for faster, smoother cutting
• Dual wavelength technology combines the optimal melanin absorption of the 810 nm wavelength and the optimal water absorption of the 980 nm wavelength
• Sleek, innovative design features a stunning transparent electroluminescent display
• Simple user interface and 19 preset procedures enhance ease of use
• Wireless foot pedal and battery operation allow for convenient movement from operatory to operatory
• Autoclavable handpiece for simple sterilization between procedures
• Designed and assembled in the U.S. from U.S. and imported components

Each Gemini purchase comes with a free accreditation course.
ETCH AND BOND
ultradent.com/au

ETCH AND BOND
ultradent.com/au

POWERFUL

ELEGANTLY POWERFUL

VALO

broadband LED curing light

VALO

broadband LED curing light

VALO Grand

VALO

VALO
• Ultra-high-energy broadband LEDs cure all dental materials
• Optimally collimated beam delivers consistent, uniform power
• Three curing modes accommodate your preferences
• Extremely durable, slim, ergonomic shape allows unprecedented access to all restoration sites
• Unique unibody design is both extremely durable and lightweight
• Highly efficient LEDs and aerospace unibody aluminum keep wand body cool to the touch

All VALO LED curing lights use a custom, multiwavelength light-emitting diode (LED) for producing high-intensity light at 385–515 nm, which is capable of polymerizing all light-cured dental materials. This intensity will also penetrate porcelain and is capable of curing underlying resin cements similar to a quality halogen light.

Unique glass lens system forms the light’s collimated blended beam

VALO® curing lights have custom LED packs that contain chips in 3 wavelengths, which enable VALO lights to cure all dental materials, whether containing proprietary photoinitiators such as Lucrin TPO, PPD, or more commonly found camphorquinone.

ultradent.com/au
Every VALO® LED curing light starts as a single bar of tempered, high-grade aerospace aluminum, which is CNC precision milled at Ultradent’s facility in Utah, USA and ends as the most advanced curing light in the world.

True unibody construction via machining ensures durability and superior heat dissipation and facilitates the elegant, ergonomic, and streamlined design that enables the VALO light to access areas other curing lights simply cannot reach.

Energy-efficient hardened glass lens resists scratching

Lowest-profile head for a broadband LED

Teflon® seal provides ease of cleaning

Scratch-resistant sapphire-hard coating

Incredibly lightweight

VALO Corded: 4.1 oz

VALO Cordless: 6 oz with batteries

VALO Grand: 6 oz with batteries

Unibody construction ensures durability and unsurpassed heat dissipation

Thin cord is long enough for freedom of movement and features Kevlar® strands for unprecedented strength, durability, and flexibility

Metal Matrix

The angle of competitor’s 60° light guide causes overextension of jaw and often makes it impossible for light to reach all aspects of preparation.

Angled light on a restoration with a matrix band can result in insufficient curing.

The VALO light’s slim head allows easy and direct access to all curing sites.

The VALO light’s direct access and a collimated beam result in complete curing.

“The VALO line of light curing products and accessories keeps setting the industry standard for highly efficient, effective, ergonomic, no-nonsense, virtually indestructible products.”

—DR. FRED RUEGGEBERG, DDS

* Trademark of a company other than Ultradent.
**VALO TECHNICAL INFORMATION**

Range of Light Output (nm) 385 nm–515 nm

<table>
<thead>
<tr>
<th>Wand</th>
<th>Weight</th>
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<tbody>
<tr>
<td>VALO Cordless</td>
<td>115 g</td>
</tr>
<tr>
<td>VALO Cordless</td>
<td>190 g</td>
</tr>
<tr>
<td>VALO Grand</td>
<td>190 g</td>
</tr>
<tr>
<td>VALO Grand</td>
<td>150 g</td>
</tr>
<tr>
<td>VALO Grand</td>
<td>5.3 oz</td>
</tr>
<tr>
<td>VALO Grand</td>
<td>5.3 oz</td>
</tr>
<tr>
<td>Dimensions</td>
<td>9.25&quot; L x 0.8&quot; W x 0.75&quot; H</td>
</tr>
<tr>
<td>VALO Cordless</td>
<td>8.5&quot; L x 1.1&quot; W x 1.3&quot; H</td>
</tr>
</tbody>
</table>

**VALO Power Supply**

- 9V DC at 2A, medical grade (UL CE)
- with surge protection of 100VAC to 240VAC

**Rechargeable batteries LiFePO4, RCR123A**
- Smart battery charger 3.6 VDC LiFePO4
- Medical grade power adapter (UL, CE, RoHS, WEEE)
- 100VAC 240VAC

**Power Supply**

- VALO Standard Power
- VALO High Power
- VALO Xtra Power
- VALO Grand Standard
- VALO Grand High Power Plus
- VALO Grand Xtra Power

**Irradiance (mW/cm²)**

<table>
<thead>
<tr>
<th>Total Power (mW)</th>
<th>Demetron LED Radiometer</th>
<th>MARC Spectrum Analyzer</th>
<th>Gigahertz Spectrum Analyzer</th>
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</thead>
<tbody>
<tr>
<td>VALO Standard Power</td>
<td>655</td>
<td>1000</td>
<td>1200</td>
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<tr>
<td>VALO High Power</td>
<td>960</td>
<td>1400</td>
<td>1600</td>
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<tr>
<td>VALO Xtra Power</td>
<td>1550</td>
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<tr>
<td>VALO Grand Standard</td>
<td>970</td>
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<td>1200</td>
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<tr>
<td>VALO Grand High Power Plus</td>
<td>1615</td>
<td>1600</td>
<td>1800</td>
</tr>
<tr>
<td>VALO Grand Xtra Power</td>
<td>2260</td>
<td>N/A</td>
<td>3200</td>
</tr>
</tbody>
</table>

**Lens Diameter**

- 9.6 mm VALO and VALO Cordless
- 11.7 mm VALO Grand

**Light Timing Programs**

- Adjustable time options

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**EFFECTIVE COMPOSITE-CURING WAVELENGTH BANDS**

**VALEO GRAND**

- XTRA POWER (2394 mW)
- HIGH POWER PLUS (1781 mW)
- STANDARD POWER (989 mW)

**EFFECTIVE COMPOSITE-CURING WAVELENGTH BANDS**

- Effective lower wavelength band 385 nm–415 nm
- Effective upper wavelength band 420 nm–450 nm
- Effective upper wavelength band 480 nm–515 nm

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*Trademark of a company other than Ultradent.*
LED CURING LIGHT

- Ultra-high-energy broadband LEDs cure all dental materials
- Optimally collimated beam delivers consistent, uniform power
- Three curing modes—Standard Power, High Power, and Xtra Power—accommodate your preferences
- Extremely durable, slim, ergonomic shape allows unprecedented access to all restoration sites
- Unique unibody design is both extremely durable and lightweight
- Highly efficient LEDs and aerospace unibody aluminum keep wand body cool to the touch
- International power supply is suitable for power outlets from 100 to 240 volts; no batteries needed

VALO Corded LED curing light uses a custom, multwavelength light-emitting diode (LED) for producing high-intensity light at 385–515 nm, which is capable of polymerizing all light-cured dental materials. This intensity will also penetrate porcelain and is capable of curing underlying resin cements. The VALO curing light has a medical-grade, international power supply and is suitable for power outlets from 100 to 240 volts. The handpiece is designed to rest in a standard dental unit bracket or can be custom mounted using the bracket included in the kit.

5919 VALO Corded Kit
- 1 x VALO LED curing light
- 7’ cord
- 1 x Power supply with universal plugs
- 6’ cord
- 1 x Handpiece bracket holder
- 1 x Light shield
- 1 x Sample pack of barrier sleeves

5930 VALO Power Supply - 6’ cord

5933 VALO Power Supply - 16’ cord

4668 VALO Barrier Sleeves 100pk

5935 Light Shield 1pk

508 Blue Light Blocking Glasses 1pk

“Se you are trying to cure the restoration on the lingual of a lower 7, thank goodness for the Valo with it’s flat profile and unique radiating head. Gagging patient, no problems especially with the Xtra Power mode curing reliably in 3 seconds. One of the things patients love about our practice is we work efficiently, this is only possible because we use reliable equipment. Being a KOL means I have to test many products from many different companies so having a light with a broad spectrum means that I can cure any resin through many materials including porcelain, which was usually only possible in the realms of a halogen light. Simple replaceable rechargeable batteries make sure I don’t get caught out. The fact that it’s pretty much unbreakable is fantastic means that I don’t worry about it breaking, because we all know how much fun it is to replace expensive equipment.”
—DR. LAN TRAN – QUEENSLAND, AUSTRALIA

“Valo is really unique. It’s a product that is small and fit in my hand easily and can be used for all curing situations. The fact that it can cure porcelain is a real plus.”
—DR. PAUL UPATHAM, DDS, MS – SAN DIEGO, CA

“A new wave of LEDs is here! The sleek VALO light operates with standard curing, and innovative high-powered curing options. It is compact, light to the touch, and offers the benefits of three lights in one.”
—DR. MARK COLONNA, DDS – WHITEFISH, MT

1. realyesthetics.com

1800 29 09 29
• Ultra-high-energy broadband LEDs cure all dental materials
• Optimally collimated beam delivers consistent, uniform power
• Three curing modes—Standard Power, High Power, and Xtra Power—accommodate your preferences
• Extremely durable, slim, ergonomic shape allows unprecedented access to all restoration sites
• Unique unibody design is both extremely durable and lightweight
• Highly efficient LEDs and aerospace unibody aluminum keep wand body cool to the touch
• Battery-operated, cordless wand design provides optimal convenience and flexibility
• Operates on environmentally responsible, safe, inexpensive, rechargeable batteries

VALO Cordless curing light uses a custom, multiwavelength light-emitting diode (LED) for producing high-intensity light at 385–515 nm, which is capable of polymerizing all light-cured dental materials. This intensity will also penetrate porcelain and is capable of curing underlying resin cements similar to a quality halogen light. The VALO Cordless curing light uses VALO rechargeable batteries and a battery charger suitable for power outlets from 100 to 240 volts. The handpiece is designed to rest in a standard dental unit bracket or can be custom mounted using the bracket included in the kit. It can also be stored on a countertop or in a drawer. The VALO Cordless curing light is equipped with a sensor that registers movement of the light; when the light is not being used, the VALO Cordless curing light will automatically go into sleep mode and when moved will return to the most recently used setting.
Cordless & Corded LED Curing Light

- Ultra-high-energy broadband LEDs cure all dental materials
- Optimally collimated beam delivers consistent, uniform power
- Three curing modes—Standard Power, High Power Plus, and Xtra Power—accommodate your preferences
- Extremely durable, slim, ergonomic shape allows unprecedented access to all restoration sites
- Unique unibody design is both extremely durable and lightweight
- Highly efficient LEDs and aerospace unibody aluminum keep wand body cool to the touch
- Second activation button on the underside allows for intuitive operation
- Battery-operated, cordless wand design provides optimal convenience and flexibility
- Operates on environmentally responsible, safe, inexpensive, rechargeable batteries

VALO Grand Cordless curing light uses a custom, multivavelength light-emitting diode (LED) for producing high-intensity light at 385–515 nm, which is capable of polymerizing all light-cured dental materials. This intensity will also penetrate porcelain and is capable of curing underlying resin cements similar to a quality halogen light. The VALO Grand Cordless curing light uses VALO rechargeable batteries and a battery charger suitable for power outlets from 100 to 240 volts. The handpiece is designed to rest in a standard dental unit bracket or can be custom mounted using the bracket included in the kit. It can also be stored on a countertop or in a drawer. The VALO Grand curing light is equipped with a sensor that registers movement of the light; when the light is not being used, the VALO Grand curing light will automatically go into sleep mode and when moved will return to the most recently used setting.
### VALO® and VALO® Cordless Accessories

(not yet available for the VALO® Grand lights)

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>5934</td>
<td>PointCure Lens 2pk</td>
</tr>
<tr>
<td>5936</td>
<td>ProxiCure Ball Lenses 2pk&lt;br&gt;1 x Each large and small</td>
</tr>
<tr>
<td>5937</td>
<td>TransLume Lenses 2pk&lt;br&gt;1 x Each orange and green</td>
</tr>
<tr>
<td>5939</td>
<td>Black Light Lens 1pk</td>
</tr>
<tr>
<td>1667</td>
<td>Mounting Bracket 1pk</td>
</tr>
</tbody>
</table>

**PointCure™ Lens**
- Clear lens for pinpoint curing of small composites or tack curing veneers.

**ProxiCure™ Ball Lenses**
- ProxiCure Ball lenses facilitate the building of convex proximal contacts. Imprint is easily filled with composite in a second step. Push ProxiCure Ball lens against interproximal wall of band; do not submerge in composite.

**TransLume™ Lenses Green & Orange**
- The green lens aids in locating and demonstrating cracks and subsurface differences.
- The penetrating ability of the orange lens shows the obstruction to light caused by posts or internal bubbles.

**Black Light Lens**
- Black Light lens aids in detecting fluorescent particles in resins for easy differentiation from natural enamel.

Lenses are reusable and should be disinfected using an intermediate-level disinfectant.

**Mounting Bracket**
- Use the mounting bracket for the VALO or VALO Cordless curing lights and mount to any surface.
The Machine III vacuum former is used to process bleaching trays, sports mouthguards, implant splints, temporary splints, custom impression trays, denture bases, copings, temporary crowns and bridges and orthodontic appliances.

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>7000332</td>
<td>Machine III Vacuum Former 220V</td>
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<tr>
<td>605</td>
<td>Ultra-Trim Scalloping Scissors 1pk</td>
</tr>
</tbody>
</table>

Glasses are flexible and impact resistant for ultimate durability. Orange lenses protect against the blue light generated by the VALO® curing lights.

Machine III
VACUUM FORMER

The Machine III vacuum former is used to process bleaching trays, sports mouthguards, implant splints, temporary splints, custom impression trays, denture bases, copings, temporary crowns and bridges and orthodontic appliances.

UltraTect protective eyewear is made for the modern dental environment. The high-quality, lightweight frames and polycarbonate lenses are both comfortable and durable, and they meet ANSI and CE safety standards for protection against impact injuries and chemical exposure. Clinicians, assistants, and patients all benefit from the safety and comfort of UltraTect eyewear.

Note: Do not use for laser protection.

<table>
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<tr>
<th>Code</th>
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<tr>
<td>914</td>
<td>Maroon Frame/Brown Lens 1pk</td>
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<tr>
<td>501</td>
<td>Black Frame/Clear Lens 1pk</td>
</tr>
<tr>
<td>508</td>
<td>Black Frame/Orange Lens 1pk (Blue Light Blocking glasses)</td>
</tr>
</tbody>
</table>

“...I have 2 of these, that pretty much sums it up. A true general practice “go to” tool. Endo, hygiene, Oral Pathology, Oral Surgery, Prosthetics, aesthetics, orthodontics, TMD – this covers pretty much all aspects of dentistry and most important of all without an additional pharmacological load to the patient. This unique laser not only offers a true alternative to traditional scalpels but opens up the practitioner to being able to treat for conditions previously thought to be untreatable or non-viable to treat. Very little effort is required to remove tissue or treat muscular issues thanks to the dual wavelengths. Ideal outcomes for the patient as the laser will cut, seal and heal.”

—DR. LAN TRAN – QUEENSLAND, AUSTRALIA

Ultradent® Ultra-Trim Scalloping Scissors

- Precisely trims tray border around interdental papilla
- Spring-loaded to minimize finger fatigue
- Grips tray material easily
- Made of durable stainless steel
CASE STUDY

Recalcitrant Necrotizing Ulcerative Gingivitis treated with Low-Level Laser Therapy using a Dual-Wavelength SuperPulsed Diode Laser

ABOUT THE DENTIST

Dr. Clarence Tam is originally from Toronto, Canada, where she completed her Doctor of Dental Surgery and General Practice Residency at the University of Western Ontario and the University of Toronto, respectively. Clarence’s practice is mostly limited to cosmetic and restorative dentistry. She is well-published to both the local and international dental press, writing articles, reviewing and developing prototype products and techniques in clinical dentistry. She frequently and continually lectures internationally.

Dr. Clarence Tam is the Chairperson and Director of the New Zealand Academy of Cosmetic Dentistry. She is the first and only to hold Board-Certified Accredited Member Status with the American Academy of Cosmetic Dentistry in Australasia.
A healthy 11 year old male presented to the practice with a chief concern around areas featuring pseudomembranous ulceration covering slightly cratered interdental papillae and extreme sensitivity to manipulation or touch via home hygiene routines. The patient’s oral hygiene was immaculate, yet excessive bleeding was noted with either brushing or flossing in the region. Differential diagnoses included necrotizing ulcerative gingivitis (NUG), hyperkeratosis, cyclic neutropenia, desquamative gingivitis, lichen planus, ascorbic acid deficiency and primary herpetic gingivostomatitis. Medical history ruled out any history of taking non-steroidal anti-inflammatory drugs, and there were no signs of lymphadenopathy or malaise.

Initial presentation with NUG affecting the 23-25 region featuring a pseudomembrane covering an ulcerated and hypersensitive gingival complex.

As the patient’s oral hygiene was immaculate, a course of antibiotics comprising Amoxicillin (500mg) q8h x 7 days p.o. along with Metronidazole (200mg) q8h x 7 days p.o. was prescribed along with instructions to apply a chlorhexidine gel to the area twice a day.
WEEK 1

Situation at 1 week reassessment.
Residual areas of healing ulceration present.

WEEK 2

Situation at 2 week reassessment:
Near-complete healing of 23-25 region, but exacerbation of NUG in the 14-15 region. A course of antibiotics comprising Clindamycin (600mg) q8h x 7 days p.o. and Metronidazole (200mg) q8h x 7 days was prescribed in an attempt to counter this new round of ulceration.
This region did not heal as the 23-25 region did following the first course of antibiotics. The situation at the 3 week reassessment revealed a flare-up of NUG lesions in the 25, 13, 14, 15 regions. A decision was made to use Low Level Laser Therapy (LLLT) or photobiomodulation therapy (PBT) delivered by way of an uninitiated dual-wavelength diode laser tip in an attempt to arrest the lesion progression. The laser (Gemini, Ultradent Products, UT) was utilized due to its Super-Pulsed character, which allows for ample tissue relaxation between cycles of laser pulses, and also because it features two distinct wavelengths. The 980nm wavelength has been characterized in multiple studies including the successful treatment not only of recurrent apthous ulcers but also oral lichen planus lesions refractory to conventional treatment (1).

The protocol involved having the dual-wavelength diode laser using a 400 micron tip, uninitiated mode set at 0.6W, Super-Pulsed (Aphthous Ulcer setting) at a distance of 4mm, virtually painting the respective lesions for 20 seconds, moving the laser away if the patient feels any warmth. This treatment session occurred directly before the practice closing for the Christmas holidays. The next reassessment was 3 weeks following LLLT, with complete resolution of all lesions and no new sites of ulceration. The patient reported extremely rapid resolution of symptoms and lesion appearance in the days following the procedure.
BIOLOGY

The mode of LLLT action is purported to be via absorption of laser energy by the photoreceptor cytochrome-c oxidase in mitochondria, driving the process of oxidative phosphorylation and the Krebs cycle resulting in the production of adenosine triphosphate (ATP). This in turn potentially upregulates macrophage action, fibroblasts, histamine release, bradykinin, endothelial cells which act to accelerate the overall coordinated healing response (2).

PRODUCTS USED

“Overall, the ability of the Gemini to utilize the efficiencies of both the 810 and 980nm wavelengths of lasers in a tissue-respective Super-Pulsed mode up to a 20W maximum power allows the provision of gentle yet effective precision in both surgical and therapeutic modalities. It is an invaluable tool that will not only catalyze healing whilst augmenting your clinical arsenal and predictability, it will also Super-Pulse your practice growth.”

- Dr. Clarence Tam, HBSc, DDS, FIADFE, AAACD

References


FINISH

Jiffy Original Composite
Jiffy Universal Ceramic
DeOx
Ultradent Diamond Polish Mint Jiffy
Goat Hair Brush
Jiffy Composite Polishing Brushes
PermaSeal
PrimaDry
• Excellent for adjusting and polishing any composite material including Amelogen® Plus, Vit-l-escence®, and Mosaic® composites
• Polishing cups feature a flared, flexible thin-wall design that is ideal for polishing near the gingiva
• Available with or without autoclavable aluminum blocks*
• Ultradent grit gives a beautiful finish on any composite material
• Not made with natural rubber latex

**TECHNIQUE**

1. Gross to Fine Shaping
   Use the green (coarse), yellow (medium), and then the white (fine) Jiffy polishers for quick shaping of composites with overbuilds and slight irregularities.

2. High Shine Polish
   Use the blue (ultrafine) Jiffy HiShine system as an additional polishing step to provide an extra smooth and highly polished finish.

3. Final Finish Option
   The unique Jiffy® Goat Hair Brush used with Ultradent® Diamond Polish Mint gives a final esthetic finish to ceramic restorations.

“Jiffy Polishers provide a great finish to my composite restoration in a time-efficient manner.”
—DR. MARK KOENEN – DANVILLE, CA

* Ultradent recommends the use of an aluminum block when autoclaving to prevent warping and deformation.
1. realityesthetics.com.
INTRAORAL FINAL POLISHING
Recommended speed: 5,000–7,500 RPM

Use ultrafine Jiffy Blue HiShine Polishing cup as an additional step to create an extra smooth and highly polished finish on cusp, labial, buccal, and cervical areas.

Use ultrafine Jiffy Blue HiShine Polishing disk as an additional step to create an extra smooth and highly polished finish on labial surfaces.

Use Jiffy HiShine Blue Polishing point as an additional step to create an extra smooth and highly polished finish on occlusal and labial surfaces.

INTRAORAL ADJUSTING
Recommended speed: 300,000 RPM

Jiffy Diamond Fine Egg Large adjusts occlusal surfaces.

Jiffy Diamond D6F Fine Needle adjusts margins and labial surfaces.

Jiffy Diamond D8F Fine Flame adjusts margins and labial surfaces.

Recommended speed: 450,000 RPM

Jiffy Interproximal Diamond adjusts interproximal surfaces. Also great for sealant groove preparation.

INTRAORAL FINAL POLISHING
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Jiffy Diamond D8F Fine Flame adjusts margins and labial surfaces.

Recommended speed: 450,000 RPM

Jiffy Interproximal Diamond adjusts interproximal surfaces. Also great for sealant groove preparation.
UNIVERSAL CERAMIC ADJUSTING AND POLISHING SYSTEM

- Universal application on all ceramic materials eliminates the need for multiple adjusters and polishers, saving you time and money
- Specially formulated Ultradent diamond grit provides optimal smoothness and outstanding polishing results while still being gentle on any ceramic material including zirconia
- Multi-grit diamond particles allow for effective adjustment of ceramics for a truly smooth and high-gloss finish
- Optimized two-step adjusting and polishing sequence
- Maximum diamond retention ensures a long service life
- Autoclavable aluminum block extends the life of the system

EXTRAORAL ADJUSTING
- Use light hand pressure
- Coarse diamond instruments and traditional abrasive stones can generate high heat, causing microfractures, and are not recommended

**Recommended speed:** 8,000–12,000 RPM

- Jiffy Universal Coarse Grinders (Green) are recommended for grinding down sprues and gross adjustment.
- Jiffy Universal Medium Grinders (Yellow) are designed for adjustments of lithium disilicate, zirconia, and feldspathic porcelain.

EXTRAORAL POLISHING
- Use light hand pressure
- Reduce speed with each step to achieve an ultra-smooth surface

**Recommended speed:** 7,000–10,000 RPM

1. Use Jiffy HP Medium Universal Wheel to pre-polish.
2. Use Jiffy HP Fine Universal Wheel to create final polish.

INTRAORAL ADJUSTING
- Use copious amounts of water

**Recommended speed:** 15,000–20,000 RPM

1. Use Jiffy Fine Football to adjust occlusal surfaces.
2. Use Jiffy Fine Round End Taper to adjust contacts.

INTRAORAL POLISHING
- Use light hand pressure
- Reduce speed with each step to achieve an ultra-smooth surface

**Recommended speed:** 5,000–7,000 RPM

1. Use Jiffy Universal RA Medium and Fine Point intraorally to pre-polish on occlusal and labial surfaces.
2. Use Jiffy Universal RA Medium and Fine Cup intraorally to create final polish on cusp, labial, buccal, and cervical areas.

**TECHNIQUE**

<table>
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<tr>
<th>Coarse</th>
<th>Medium</th>
<th>Medium</th>
<th>Fine</th>
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1. Extraoral Kit for Gross Adjustments and Polishing
   - Use the green (coarse) and yellow (medium) Jiffy grinders and tapers for adjusting of ceramics. The orange Universal wheels and Natural wheels are used to polish.

2. Intraoral Kit for Minor Adjustments and Polishing
   - Use the fine football and round end taper diamonds for the adjusting of ceramics. The orange medium and fine points, cups, and orange Natural wheels are used to polish.

3. Final Finish Option
   - The unique Jiffy® Goat Hair Brush used with Ultradent® Diamond Polish Mint gives a final esthetic finish to ceramic restorations.
## SURFACE ROUGHNESS (UIR)²

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### DeOx®

**VISCOUS OXYGEN BARRIER SOLUTION**

- Prevents oxygen-inhibited layer formation
- Provides easy delivery

DeOx barrier solution is a viscous, glycerine-based gel designed to prevent formation of an oxygen-inhibited layer on the surface of resin materials when they are polymerized.

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<tbody>
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<td>238</td>
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1. realityesthetics.com.

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**The comprehensive Jiffy Porcelain/Lithium Disilicate/Zirconia adjustment kit provides an easy to use 2-step system for discerning clinicians. The autoclavable caddy includes burners for minor adjustments before generating a predictably smooth, reproducible glass-like finish without the headache of using all the time and attaining half the result that is often the case seen with conventional direct polishing kits.**

—DR. CLARENCE TAM, AUCKLAND, NEW ZEALAND

**“These polishing kits give a very nice sheen and are better than any others I’ve used.”**

—DR. WILLIAM J. DUNBAR DDS, GLENCOE, MN

*Trademark of a company other than Ultradent. 1. Data on file.*
Each bristle is a polishing instrument. Special fibers are impregnated with abrasive silicon carbide particles.

Jiffy® Goat Hair Brush

- Constructed of fine goat hairs
- Use moderate/firm pressure and high RPM in slow-speed handpiece

Recommended speed: 15,000 RPM

Jiffy® Composite Polishing Brushes

- Each bristle contains thousands of silicon carbide polishing particles
- Access and polish occlusal fissures of composites or ceramics
- Integrity is maintained through limited autoclaving cycles
- For composite polishing, “whip” bristles with firm pressure and high RPM in a slow-speed handpiece

Recommended speed: 1,000–3,000 RPM

Ultradent® Diamond Polish Mint

- High-grade white microcrystalline diamond particles
- Unsurpassed esthetic polish
- Ideal for porcelain or composite restorations

Use Ultradent Diamond Polish Mint with Jiffy Goat Hair Brushes.

5540 Diamond Polish Mint Syringe 0.5 µm 2pk
5541 Diamond Polish Mint Syringe 1 µm 2pk
1.2 ml syringes

Jiffy® Composite Polishing Brushes
REGULAR AND POINTED

Use Jiffy Composite brushes to create a final finish on all surfaces. For best results, apply pressure during polishing.

1. realityesthetics.com.

1029 Jiffy Goat Hair Brush 10pk

1. realityesthetics.com.

Ultradent® Diamond Polish Mint

5540 Diamond Polish Mint Syringe 0.5 µm 2pk
5541 Diamond Polish Mint Syringe 1 µm 2pk
1.2 ml syringes

Jiffy® Goat Hair Brush

- Each bristle is a polishing instrument. Special fibers are impregnated with abrasive silicon carbide particles.
- Easily recognizable by their golden shafts.

Jiffy® Composite Polishing Brushes
REGULAR AND POINTED

Each bristle is a polishing instrument. Special fibers are impregnated with abrasive silicon carbide particles.

Easily recognizable by their golden shafts.

850 Jiffy Regular Brush 10pk
1009 Jiffy Pointed Brush 10pk

1. realityesthetics.com.

Jiffy® Goat Hair Brush is used with Ultradent Diamond Polish for a final esthetic finish.

Recommended speed: 1,000–3,000 RPM

Use Jiffy Composite brushes to create a final finish on all surfaces. For best results, apply pressure during polishing.

1. realityesthetics.com.

Jiffy® Goat Hair Brush

- Each bristle is a polishing instrument. Special fibers are impregnated with abrasive silicon carbide particles.
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1009 Jiffy Pointed Brush 10pk

1. realityesthetics.com.
**PermaSeal®**

**PENETRATING COMPOSITE SEALER**

- Bonds to composite and etched enamel
- Seals microcracks
- Protects and revitalizes composite restorations

PermaSeal composite sealer is a light-cured, methacrylate-based, unfilled resin. Its low viscosity allows excellent penetration, and the ultrathin layer minimizes the need for occlusal adjustment.

PermaSeal composite sealer seals voids and irregularities created during the polishing process, minimizing staining and wear. Place on Class V composite margins to reduce microleakage. For the final glaze-type finish of resin provisionals, cover PermaSeal sealer with DeOx® barrier solution prior to light curing. PermaSeal sealer bonds well to composite-type provisional restorations such as ExperTemp and can be used to revitalize old composites as well.

**NEW RESTORATIONS**

Before: Interproximal spaces and slight rotations to be corrected with Peak® Universal Bond adhesive and composite. Air thin and light cure for 20 seconds.

After restoring and polishing, etch 5 seconds and apply PermaSeal composite sealer to seal composite and create a glossy finish.

**EXISTING RESTORATIONS**

Always clean existing composite restorations and adjacent enamel using Consepsis® Scrub slurry, pumice, or a microetcher. Rinse and etch 15 seconds. Rinse thoroughly and air dry.

Four-year-old bonded composite following PermaSeal composite sealer treatment.

“Hands down, your composite sealer makes the composite look finished, gives it a glossy look, and ‘fills’ the microscopic pits. It makes or breaks my composites! I can’t live without it!”

—DR. RICHARD J. HAULEY – SALT LAKE CITY, UT

**631 PermaSeal Kit**

- 4 x 1.2 ml syringes
- 10 x Black Micro FX tips

**1013 PermaSeal Mini Kit**

- 2 x 1.2 ml syringes
- 10 x Black Micro FX tips

**PrimaDry®**

**DRYING AGENT**

PrimaDry drying agent contains 99% organic solvents and 1% primer and is optimal for pit and fissure drying and preparation. It rapidly volatilizes moisture content of pits and fissures and microcracks of existing restorations following the etching process. The ultrafine primer film allows UltraSeal XT® plus sealant or PermaSeal to flow perfectly into every pit and fissure. Also useful prior to placing composite repairs. Do not use on dentin.

**716 PrimaDry Syringe 4pk**

- 4 x 1.2 ml syringes

**717 PrimaDry Syringe 20pk**

- 20 x 1.2 ml syringes

ultradent.com/au
Thermo Clone impression material’s thermal set properties accelerate the setting time as soon as you put it in your patient’s mouth. That means a shorter procedure and less discomfort for your patient. What will you do with your free time?
Thermo Clone impression material is heat-sensitive. This means that as the temperature of the material increases, the setting time decreases. We call this a Thermal-Accelerated Set.

At room temperature, Thermo Clone material stays unset, with a working time of up to 1:30. Once the tray is placed in the patient’s mouth, the material rapidly begins to set due to the increased temperature. This accelerated setting time means there’s less chance of distortion. See the graph in the next column to view the setting time of Thermo Clone material. The materials were placed into an environment that simulated a patient’s mouth and were continually tested to determine the setting stage.

1. You determine the working time of up to 1:30. The material begins to set as soon as it is placed in the patients’ mouth.
2. Thermo Clone material exits the Critical Zone in only 80 seconds!
3. In this data set, Thermo Clone material was fully set 90 seconds after being placed in the simulated mouth.

The Thermal-Accelerated Set provided by Thermo Clone material gives you a long working time if desired, and a short setting time, hence minimal time in the critical zone.

1. The competitor’s material has a maximum and minimum working time of 35 seconds. The material begins to set at the same time regardless of when it is placed in the mouth.
2. The material stays in the Critical Zone for 3:30.
3. In this data set, the material was completely set 3:55 after being placed in the simulated mouth.

Note: The Critical Zone denotes the time between when the material starts to set intraorally and when it is completely set. This is when distortions most often occur, resulting in extra lab work, poorly fitting restorations, and costly retakes.

* Please refer to the Instructions for Use for recommended intraoral time.
**Thermo Clone® VPS 50 ml Cartridges**

<table>
<thead>
<tr>
<th>Cartridge Type</th>
<th>Regular 2pk</th>
<th>Fast 2pk</th>
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<tbody>
<tr>
<td>Super Light</td>
<td>4060</td>
<td></td>
</tr>
<tr>
<td>Light</td>
<td>4057</td>
<td>4065</td>
</tr>
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2 x 50 ml cartridges
12 x Each Mixing/IntraOral tips

<table>
<thead>
<tr>
<th>Cartridge Type</th>
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<th>Fast 2pk</th>
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<tbody>
<tr>
<td>Medium</td>
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<td>4066</td>
</tr>
<tr>
<td>Heavy</td>
<td>4059</td>
<td>4067</td>
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</table>

2 x 50 ml cartridges
6 x Each Mixing tips

<table>
<thead>
<tr>
<th>Cartridge Type</th>
<th>Fast 10pk</th>
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<tbody>
<tr>
<td>Light</td>
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</table>

10 x 50 ml cartridges
48 x Each Mixing/IntraOral tips

<table>
<thead>
<tr>
<th>Cartridge Type</th>
<th>Fast 10pk</th>
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<tbody>
<tr>
<td>Heavy</td>
<td>4077</td>
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10 x 50 ml cartridges
30 x Mixing tips

**Thermo Clone® VPS Jumbo Cartridges**

<table>
<thead>
<tr>
<th>Cartridge Type</th>
<th>Regular 1pk</th>
<th>Fast 1pk</th>
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<tbody>
<tr>
<td>Medium 380 ml</td>
<td>4068</td>
<td>4070</td>
</tr>
<tr>
<td>Heavy 380 ml</td>
<td>4069</td>
<td>4071</td>
</tr>
</tbody>
</table>

1 x 380 ml cartridges
10 x Dynamic Mixing tips

**Thermo Clone® VPS Accessories**

- 4073 Thermo Clone VPS Putty
  1 x Each 200 ml base and 200 ml catalyst
  2 x Scoops
- 5100 Dispensing Gun 1pk

“Thermoclon is the first PVS material that I consider a triple threat: 1) it is a superhydrophilic and tear resistant A-silicone impression material engineered for accuracy in the moist sulcus, 2) it exhibits rapid thermo-accelerated setting for patient comfort, and 3) smells like my childhood (the good part). In a day and age where still only PVS impressions can lift Abraham Lincoln’s face off a $5 note, this material is my go-to for unprecedented detail.”

—DR. CLARENCE TAM – AUCKLAND, NEW ZEALAND
FOR IMPRESSION MAKING

An astringent is a substance that eliminates permeability of epithelium to tissue fluid flow. The result is a dry field, an important tissue management solution. An ideal impression for successful crowns and bridges must accurately capture the preparation margins. This can be ensured only through reliable hemostasis and gingival displacement.

HYDROPHILIC

Hydrophilicity ensures precision in your impressions by displacing moisture so the material can reach every part of every tooth.

Hydrophilicity is evaluated based on contact angle, which measures how flat a drop of water spreads over the material. Thermo Clone material is among the industry leaders in hydrophilicity.

BLEEDING

HEMOSTASIS

1. Subgingival preparation with bleeding.

2. Burnish Astringedent® X hemostatic firmly against sulcus with Metal Dento-Infusor® tip.

THIXOTROPIC

Thixotropic materials become more fluid as they are agitated—like when they are applied to a crown preparation—and thicken when they are in place. This means that when Thermo Clone material is placed, the material flows into the sulcus and the spaces between teeth. This ensures a detailed impression and clear margins.

CLEANING/TESTING

DISPLACEMENT

3. Firm air/water spray removes residual coagulum and tests tissue for quality, profound hemostasis.


DRYING/TESTING

MAKE IMPRESSION

5. Remove Ultrapak® knitted cord, follow with a firm air/water spray and dry.

6. Cover preparation with wash material.

RESULT

7. Predictable quality impressions.

Thermo Clone® Bite Registration

BITE REGISTRATION MATERIAL

- 2 x 50 ml cartridges
- 12 x Mixing tips

Bite Registration

50 ml | 2pk
---|---
4072

Thermo Clone Bite Registration material makes a quick accurate impression for an exact bite registration.
Sable Seek
Seek
STARbrush PropGard
InterGuard
DermaDam
DermaDam Synthetic
Omni-Matrix OraSeal
Consepsis Scrub

JAMES STOSICH
Misery Canyon, Utah
Sable™ Seek® and Seek®
CARIES INDICATORS

• Stains demineralized dentin
• Provides precise, mess-free delivery
• Available in dark green for working near pulp
• Aids in identifying root canal orifices

Sable Seek caries indicator contains FD&C dyes, and Seek caries indicator contains D&C dyes in a glycol base. Both are used to stain carious dentin.

Seek and Sable Seek caries indicators stain demineralized dentin in difficult-to-see places—for example, under the overhanging enamel of Class I, II, or III preparations, or along the DE junction of the preparation. Green Sable Seek caries indicator helps prevent overexcavating deep caries, which can lead to pulp exposure. Non-mineral dentin should be removed to improve the bond strength of the entire restoration, and is easily visible on dark dentin and provides a fast, effective way to locate calcified root canal orifices.

Sable Seek caries indicator contains FD&C dyes, and Seek caries indicator contains D&C dyes in a glycol base. Both are used to stain carious dentin.

1. Apply Sable Seek indicator with Black Mini Brush tip.
2. Rinse with air/water and suction. Caries dentin is easily identified.
3. Remove green-black color (carious dentin) with slow-speed round bur or excavator. To control overexcavating near the pulp, remove final portion of caries with hand excavator.

Sable™ Seek® & Seek®
CARIES INDICATORS
Be certain you’ve identified all demineralized dentin. With highly visible colors and mess-free syringe delivery, Sable Seek and Seek caries indicators make finding caries a simple process of seek and find.
PropGard®
MOUTH PROP

- Soft is designed to give some jaw relief
- Firm is for when optimal opening needs to be maintained

PropGard mouth prop’s wedge design prevents contamination from tongue and mouth closure and also helps protect the tongue from trauma. Scrub with a brush, disinfect, and cold sterile (do not autoclave).

DermaDam®
RUBBER DAM

- Low dermatitis potential
- Strong and tear resistant
- Powder free to reduce allergic reactions

DermaDam rubber dam is made from pure latex rubber and is powder free, which reduces the possibility of latex reactions. Quality processing ensures a low content of surface proteins.

<table>
<thead>
<tr>
<th>311</th>
<th>DermaDam Medium 0.20 mm 36pk</th>
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</thead>
<tbody>
<tr>
<td>6&quot; x 6&quot; (15 cm x 15 cm)</td>
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<table>
<thead>
<tr>
<th>314</th>
<th>DermaDam Heavy 0.25 mm 36pk</th>
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<tbody>
<tr>
<td>6&quot; x 6&quot; (15 cm x 15 cm)</td>
<td></td>
</tr>
</tbody>
</table>

DermaDam® Synthetic
DENTAL DAM

DermaDam Synthetic dental dam is not made with natural rubber latex, but is designed to be just as flexible and durable as dams that are composed of natural rubber latex.

Zero sensitizing proteins

| 1  | realityesthetics.com. |

| DermaDam Medium Synthetic 0.20 mm 20pk |
| 6" x 6" (15 cm x 15 cm) |

<table>
<thead>
<tr>
<th>4100</th>
<th>PropGard Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 x Each PropGards large yellow and regular purple</td>
<td></td>
</tr>
<tr>
<td>10 x Each Tongue guards left and right</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4102</th>
<th>Tongue Guard 10pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 x Each right and left</td>
<td></td>
</tr>
</tbody>
</table>
OraSeal®
CAULKING AND PUTTY

- Adheres under water and saliva
- Provides a protective seal against gingival exposure to peroxide, hydrofluoric acid
- Ideal for blocking out unwanted spaces for impressions
- Effectively adheres to wet rubber dams, tissue, teeth, and metal
- Stiffer Putty compared to Caulk to meet clinical preferences

OraSeal Caulking material can seal leaks in a rubber dam, even when submerged. Apply around border, then criss-cross over hole until seal is complete.

Procedure

1. Use OraSeal Caulking material when an adequate seal is difficult to obtain with compromised teeth or roots. OraSeal Caulking material may also be used to repair rubber dam leaks. It seals the rubber dam when performing a porcelain repair, protecting gingiva from hydrofluoric acid. Deliver into undercuts and below implant bars, precision attachments, etc. to prevent cold cure acrylic or impression material from locking into empty spaces. Fill in gingival embrasures of splints and bridges to facilitate easy cleanup of permanent cement. Also used to fill in screw holes on implant impressions prior to making impressions. OraSeal Putty material can perform the same functions, but it has a stiffer consistency, which some doctors prefer.

2. Ensure rubber dam seal when using strong peroxide for vital whitening, or when porcelain etching with hydrofluoric acid.

3. Block out large interproximal spaces for easy and distortion-free removal of impression.

4. Ensure moisture control when bonding lower orthodontic brackets. Seal with Caulking or Putty to prevent saliva from seeping through embrasures and contaminating area.

5. Block out undercuts below and around prosthetic implant clip. Flexing component of clip is covered with putty to accommodate clip flexure during insertion and removal.

USES

- Ensure rubber dam seal when using strong peroxide for vital whitening, or when porcelain etching with hydrofluoric acid.
- Block out undercuts below and around prosthetic implant clip. Flexing component of clip is covered with putty to accommodate clip flexure during insertion and removal.
- Ensure moisture control when bonding lower orthodontic brackets. Seal with Caulking or Putty to prevent saliva from seeping through embrasures and contaminating area.
- Block out large interproximal spaces for easy and distortion-free removal of impression.
- Use under fixed partial or implant bar prior to making an impression.
- Use as a block-out medium prior to anchoring attachments, clips, etc. with cold cure acrylic.

USES

- OraSeal Kit

  2 x 1.2 ml OraSeal Caulking syringes
  2 x 1.2 ml OraSeal Putty syringes
  4 x Black Mini tips
  20 x White Mac tips

- OraSeal Caulking Syringe 4pk
  1.2 ml syringes

- OraSeal Putty Syringe 4pk
  1.2 ml syringes

- OraSeal Caulking Syringe 20pk
  1.2 ml syringes

- OraSeal Putty Syringe 20pk
  1.2 ml syringes

1. realityesthetics.com
### Consepsis® Scrub

**CHLORHEXIDINE ANTIBACTERIAL SLURRY**

- Reduces post-op sensitivity
- Does not compromise bond strength
- Comes in a nonsplatter formula
- Use to clean prior to crown cementation or around ortho brackets
- Use with STARbrush brush prior to sealant placement

Consepsis Scrub antibacterial slurry is a lightly flavored 2.0% chlorhexidine gluconate (relative to liquid component) antibacterial scrub. Instead of powdered pumice, which may contain several trace impurities from volcanic ash, Consepsis Scrub slurry uses inert, finely ground Pyrex® glass as an abrasive scrub. Never use prophy paste for prep cleaning, as it contains several potentially contaminating ingredients.

Use Consepsis Scrub slurry for removing residual temporary cement prior to permanent cementation and for removing debris. Scouring with a quality antibacterial prior to restoring minimizes the potential for post-op sensitivity associated with an influx of microorganisms into dentinal tubules.

**Note:** Evidence demonstrates that you can further reduce post-op sensitivity by sealing dentin before cementation. Use PermaFlo® DC luting resin.

<table>
<thead>
<tr>
<th>730</th>
<th>Consepsis Scrub Kit</th>
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<tbody>
<tr>
<td></td>
<td>4 x 1.2 ml syringes</td>
</tr>
<tr>
<td></td>
<td>2 x STARbrush brushes</td>
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<tr>
<td></td>
<td>20 x White Mac tips</td>
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<table>
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<th>546</th>
<th>Consepsis Scrub IndiSpense Kit</th>
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<tbody>
<tr>
<td></td>
<td>1 x 30 ml IndiSpense syringe</td>
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<tr>
<td></td>
<td>2 x STARbrush brushes</td>
</tr>
<tr>
<td></td>
<td>20 x White Mac tips</td>
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<tr>
<td></td>
<td>20 x 1.2 ml empty syringes</td>
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<table>
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<tbody>
<tr>
<td></td>
<td>1.2 ml syringes</td>
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<table>
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<tr>
<th>689</th>
<th>Consepsis Scrub IndiSpense Syringe 1pk</th>
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<tbody>
<tr>
<td></td>
<td>30 ml syringe</td>
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</tbody>
</table>

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**STARBush®

INTERCORONAL BRUSH**

- Effectively cleans in hard-to-reach areas
- Tight fibers help to prevent messes and apply appropriate pressure
- Great for cleaning pits and fissures with Consepsis® Scrub antibacterial slurry prior to sealants

<table>
<thead>
<tr>
<th>1091</th>
<th>STARBush 30pk</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>1093</th>
<th>STARBush 100pk</th>
</tr>
</thead>
</table>
PROBLEM: Stain under hydrophobic provisional cement

SOLUTION: Use sealing provisional hydrophilic cements (e.g., UltraTemp® temporary luting material)

CHEMISTRIES (THE “WHYS”):
1. Nonsealing cements allow saliva and bacteria to move between the temporary and preparation.
2. Coagulum within cut tissues is a source of iron, which reacts with the hydrogen sulfide gas (rotten egg gas, H₂S) produced by anaerobic bacteria in this septic environment. The reaction yields ferric sulfide, the harmless yet annoying dark surface stain shown on the right. This stain can occur to a lesser degree from the natural iron in blood. Additionally, nonsealing provisionals are problematic, as saliva and/or bacteria removes the smear layer, opening tubules to bacteria.¹

HOW TO PREVENT:
Use a quality sealing provisional cement like Ultradent’s non-eugenol, hydrophilic, polycarboxylate, paste-to-paste UltraTemp temporary luting material.

Similar staining can occur even under definitive direct or indirect restorations if contamination is on the preparation prior to bonding. Scour and etch prior to dentin bonding agent application. For scouring, we recommend Consepsis Scrub slurry with a STARbrush® intercoronal brush.

CASE 1
Two weeks earlier upon preparation, ViscoStat® hemostatic with Dent-O-Infusor® tip was used to arrest bleeding. Provisional crowns were cemented with a popular NON-sealing, hydrophobic, resin-based temporary cement.

CASE 2
Provisionals have been removed. Characteristic dark stain is observed on preparations. This can be removed by ultrasonic scaling and scouring with Consepsis® Scrub slurry. It’s preferable to prevent it by using a hydrophilic provisional cements such as UltraTemp® temporary luting material.


The InterGuard proxactor ensures a faster, safer preparation by protecting the adjacent tooth from iatrogenic damage.² Stable curls at each end leave transition angles clear for full access. The InterGuard proxactor is great for tunnel preparations and protecting the adjacent tooth during air abrasion.

InterGuard®
PROXITECTOR

“InterGuard proxactor was developed as a protective shield following the publication of a clinical investigation proving that two-thirds of the approximal surfaces of adjacent teeth showed evidence of iatrogenic preparation damage. In my office I soon found that InterGuard allows you to work both faster and safer, and I am proud to have contributed with a tool which has been called another step in the direction of higher quality dentistry.”

—DR. OLE OSTERBY, INVENTOR, DENMARK

Clinical Pointer

PROXITECTOR

CASE 1 CASE 2
Provisionals have been removed. Characteristic dark stain is observed on preparations. This can be removed by ultrasonic scaling and scouring with Consepsis® Scrub slurry. It’s preferable to prevent it by using a hydrophilic provisional cements such as UltraTemp® temporary luting material.


Omni-Matrix™
DISPOSABLE RETAINER AND MATRIX

The new Omni-Matrix disposable retainer and matrix is a superior circumferential matrix band solution. It’s a simple restorative tool designed to perfectly customize to any preparation. The band’s circumference can be easily adjusted simply by twisting the handle and the pivoting head allows it to access any quadrant of the mouth. Once the restoration is complete, the Omni-Matrix band easily releases without disturbing the restorative material.

“Fast, easy, convenient, disposable! What else could you ask for?”
—DR. GEORGE FREEDMAN

<table>
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<tr>
<th></th>
<th>Winged 48pk</th>
<th>Wingless 48pk</th>
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<tr>
<td>0.001 Orange</td>
<td>8801</td>
<td>7701</td>
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<tr>
<td>0.0015 Green</td>
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<td>7702</td>
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<td>Pedo Purple</td>
<td>8804</td>
<td>7704</td>
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<tr>
<td>Mylar Red</td>
<td>8803</td>
<td>7703</td>
</tr>
</tbody>
</table>

ultradent.com/au
PUT THE TREAT BACK IN FLUORIDE TREATMENT!

SEE PAGE 93 FOR ENAMELAST FLUORIDE VARNISH!

ENAMELAST FLUORIDE VARNISH HAS A SMOOTH TEXTURE AND IS ALMOST INVISIBLE ON THE TOOTH.

And the superior fluoride uptake of Enamelast varnish means you can give your patients protection that lasts.

It is available in four great flavors—Walterberry, Orange Cream, Bubble Gum, and Cool Mint!
PREVENT AND HYGIENE

UltraSeal XT plus
PrimaDry
UltraSeal XT hydro
Ultrapro Tx Disposable Prophy Angle
Ultrapro Tx Prophy Paste
Enamelast
Ultradent Universal Dentin Sealant
Opalpix
UltraSeal XT® plus+™
HYDROPHOBIC PIT AND FISSURE SEALANT

- High retention rate
- Direct delivery into difficult-to-access areas
- Bubble-free, drip-free placement
- High marginal retention prevents microleakage
- Penetrates deepest pits and fissures
- Four shades: Opaque White, Clear, A1, and A2

UltraSeal XT plus hydrophobic pit and fissure sealant is a light-cured, radiopaque, fluoride-releasing composite sealant. It is stronger and more wear resistant because it is a 58%-filled resin and has less polymerization shrinkage than competitive products. The spiral in the Inspiral Brush tip causes shear thinning of the filled, thixotropic resin, reducing its viscosity as it is placed. The resin firms up when shear thinning ceases and placement is complete, preventing the resin from running before it can be light cured. Using PrimaDry® drying agent with UltraSeal XT plus sealant enhances penetration into pits and fissures by eliminating moisture that can cause failure in hydrophobic sealants.

BEFORE AND AFTER

Before. After UltraSeal XT plus sealant.

Before. After UltraSeal XT plus sealant.

1. Etch for 30 seconds on uncut enamel, 15 seconds on cut enamel. Rinse.
2. Remove visible moisture. PrimaDry® drying agent will desiccate.
3. Apply PrimaDry agent for 5 seconds with Black Micro® FX® tip, then air dry.
4. Place UltraSeal XT plus sealant.
5. Cure for 3 seconds with VALO® curing light on Xtra Power mode or 10 seconds on Standard Power mode.

“So the most disappointing thing about fissure sealants is failure. Most times we are trying to seal the tooth before it becomes carious and this means it may not be fully erupted and moisture is not our friend for any sort of bonding. Enter Ultrasell. A hydrophyllic fissure sealant. Since using UltraSeal we have not had issues with dislodging sealants. With a low viscosity it is easy to handle so all my staff love it.”
—DR. LAN TRAN – QUEENSLAND, AUSTRALIA

“Being a pediatric dentist, this is one material I cannot practice without. I have never found such a user-friendly sealant that is so easy to apply and with such excellent retention as the UltraSeal XT plus sealant.”
—DR. DAVID GOLDSTEIN – ORLANDO, FL

“I love the UltraSeal XT plus sealant. I have used many different sealant products in my office as well as the dental school in which I am faculty. Actually, all the pediatric dental instructors had tried eight different sealants to compare, and UltraSeal XT plus was unanimously the sealant of choice. The viscosity, multiple shades, partially filled consistency, and the fact it is fluoride-releasing make UltraSeal XT plus the most reliable and superior sealant that I choose to use on my patients.”
—DR. ANGELA M. STOUT – ERDENHEIM, PA

### PrimaDry®

**Drying Agent**

PrimaDry drying agent contains 99% organic solvents and 1% primer and is optimal for pit and fissure drying and preparation. It rapidly volatilizes moisture content of pits and fissures after rinsing off etchant with water spray and air drying. The ultrafine primer film allows UltraSeal XT® plus sealant to flow perfectly into every pit and fissure. Also useful prior to placing composite repairs. Do not use on dentin.

### Physical Property Comparison

#### Shear Bond

<table>
<thead>
<tr>
<th>Product</th>
<th>Shear Bond (MPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UltraSeal XT® plus™</td>
<td>42.7</td>
</tr>
<tr>
<td>UltraSeal XT® hydro™</td>
<td>39.43</td>
</tr>
<tr>
<td>Hydrophilic Competitor</td>
<td>31.21</td>
</tr>
<tr>
<td>Hydrophobic Competitor 1</td>
<td>32.37</td>
</tr>
<tr>
<td>Hydrophobic Competitor 2</td>
<td>25.32</td>
</tr>
</tbody>
</table>

#### Hardness

<table>
<thead>
<tr>
<th>Product</th>
<th>Hardness (HK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UltraSeal XT® plus™</td>
<td>27.6</td>
</tr>
<tr>
<td>UltraSeal XT® hydro™</td>
<td>31.9</td>
</tr>
<tr>
<td>Hydrophilic Competitor</td>
<td>20.6</td>
</tr>
<tr>
<td>Hydrophobic Competitor 1</td>
<td>18.7</td>
</tr>
<tr>
<td>Hydrophobic Competitor 2</td>
<td>20.4</td>
</tr>
</tbody>
</table>

#### Shrinkage

<table>
<thead>
<tr>
<th>Product</th>
<th>Shrinkage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UltraSeal XT® plus™</td>
<td>5.98%</td>
</tr>
<tr>
<td>UltraSeal XT® hydro™</td>
<td>6.13%</td>
</tr>
<tr>
<td>Hydrophilic Competitor</td>
<td>6.68%</td>
</tr>
<tr>
<td>Hydrophobic Competitor 1</td>
<td>6.53%</td>
</tr>
<tr>
<td>Hydrophobic Competitor 2</td>
<td>7.36%</td>
</tr>
</tbody>
</table>

With its adjustable fibers and helical channel, the Inspiral® Brush tip is designed to optimally deliver UltraSeal XT® sealants.
UltraSeal XT® hydro

HYDROPHILIC PIT AND FISSURE SEALANT

- Slightly hydrophilic and also hydrophobic
- Advanced adhesive technology
- fluoresces under black light to ensure sealant is still in place
- Highly filled resin - 53%
- Thixotropic/ideal viscosity
- Two shades: Opaque White and Natural

UltraSeal XT hydro hydrophilic pit and fissure sealant is a light-cured, radiopaque, fluoride-releasing composite sealant. It is stronger and more wear resistant because it is a 53%-filled resin and has less polymerization shrinkage than competitive products. The spiral brush action of the tip causes shear thinning of the thixotropic UltraSeal XT hydro sealant. The resin stops flowing when shear thinning ceases and placement is complete, preventing it from running before it can be light cured. The advanced, hydrophilic chemistry works when all visible moisture has been removed, UltraSeal XT hydro sealant is more forgiving of moisture deep inside pits and fissures.

BEFORE AND AFTER

UltraSeal XT hydro Sealant

No microleakage. Sealed margins.

Competitor Hydrophilic Sealant

Microleakage. Peeling from margins.

FOUR SIMPLE STEPS

1. Etch for 30 seconds on uncut enamel, 15 seconds on cut enamel. Rinse.
2. Remove visible moisture.
3. Place UltraSeal XT hydro sealant.
4. Cure for 3 seconds with VALO® LED curing light on Xtra Power mode or 10 seconds on Standard Power mode.

“Since I have had such great success with Opalescence® Boost® and Opalescence® PF whitening, I also ordered the UltraSeal XT hydro sealants. I was previously using a competitor’s sealant and they would pop off within a few weeks at times and just sat on top of the tooth. While placing the UltraSeal XT hydro sealant, you can literally see the sealant going into the pits and fissures! Day and night difference, and the use of the little light is a fun way to show the kids and parents and be able to check them at their 6-month appointments!!!”

—STEPHANIE VIEAU, DENTAL ASSISTANT – CENTREVILLE, VIRGINIA

“PREVENT AND HYGIENE

After placing a sealant, it is often difficult to check margins and retention. UltraSeal XT® hydro sealant addresses that difficulty with added fluorescent properties. Fully viewable under a black light, the sealant’s fluorescence allows you to check the integrity of the sealant at the time of placement and at subsequent visits.”

Balanced water absorption allows forgiveness in moist environments without degradation.

No degradation as a result of balanced water absorption.

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3532</td>
<td>UltraSeal XT hydro Opaque White Kit</td>
</tr>
<tr>
<td>3533</td>
<td>UltraSeal XT hydro Natural Kit</td>
</tr>
<tr>
<td></td>
<td>1 x 1.2 ml UltraSeal XT hydro syringe</td>
</tr>
<tr>
<td></td>
<td>1 x 1.2 ml Ultra-Etch syringe</td>
</tr>
<tr>
<td></td>
<td>20 x Blue Micro tips</td>
</tr>
<tr>
<td></td>
<td>20 x Inspiral Brush tips</td>
</tr>
<tr>
<td>3534</td>
<td>UltraSeal XT hydro Opaque White Syringe 4pk</td>
</tr>
<tr>
<td>3535</td>
<td>UltraSeal XT hydro Natural Syringe 4pk</td>
</tr>
<tr>
<td></td>
<td>1.2 ml syringes</td>
</tr>
<tr>
<td>3536</td>
<td>UltraSeal XT hydro Opaque White Syringe 20pk</td>
</tr>
<tr>
<td></td>
<td>1.2 ml syringes</td>
</tr>
<tr>
<td>35551</td>
<td>Black Light Keychain 1pk</td>
</tr>
</tbody>
</table>

Bringing DURABILITY to light

Valo®

Broadband LED curing light

ultradent.com.au
Ultrapro Tx disposable prophy angles feature smooth, quiet gears and an ergonomic design so that both you and your patient will have a comfortable experience. With an advanced cup design both inside and out, the extra and skini angles are built to clean better than ever.

- Innovative cup design for reduced splatter and efficient cleaning
- Designed for better access and improved visibility, with 20% shorter head and 25% slimmer neck (skini angles)
- All designs feature optimal flare
- Improved outer ridges for improved interproximal cleaning and available in right-or contra-angle designs (extra and skini angles)
- Comfortable, ergonomic design
- Not made with natural latex rubber
- Skini angle is sterile to minimize risk of infection

Ultrapak® Knitted Cord
Available in six versatile sizes

<table>
<thead>
<tr>
<th></th>
<th>144pk</th>
<th>500pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soft</td>
<td>8308</td>
<td>8318</td>
</tr>
<tr>
<td>Firm</td>
<td>8307</td>
<td>8317</td>
</tr>
</tbody>
</table>

THE ORIGINAL KNITTED CORD
with Ultrapak® CleanCut

SEE PAGE 112!
Enamelast fluoride varnish is a flavored, xylitol-sweetened, 5% sodium fluoride in a resin carrier. Its unique formula is made with a patented adhesion-promoting agent for enhanced retention, while providing superior fluoride release and uptake. Available in syringe applications in Walterberry® flavor and unit-dose applications in Walterberry, Orange Cream, Cool Mint, and Bubble Gum flavors.

Enamelast fluoride varnish produces a mechanical occlusion of the dentinal tubules in the treatment of tooth hypersensitivity. The AAPD recommends fluoride varnish for use as a preventative adjunct to reduce the risk of caries. The use of fluoride varnish for caries prevention has also been endorsed by the ADA.1,2,3

BEFORE AND AFTER

Before Enamelast fluoride varnish. Immeditaley after applying Enamelast fluoride varnish.

**Ultradent® Universal Dentin Sealant**  
FOR TRANSIENT ROOT SENSITIVITY

• Quick application—paint and dry  
• Great for hygienists’ “tool box”  
• Ideal following scaling and root planing  
• Temporary blockage of tubules

Ultradent Universal Dentin Sealant is a biocompatible, nonpolymerizable, high-molecular-weight resin in a volatile organic solvent.

Coat sensitive roots with Ultradent Universal Dentin Sealant to seal tubules and reduce discomfort after root planing or scaling.

Ultradent Universal Dentin Sealant covers dentin with a protective seal. Both surfaces have been conditioned with phosphoric acid for 20 seconds; SEM on the right was sealed first with Ultradent Universal Dentin Sealant.

**Opalpix™**  
INTERPROXIMAL CLEANER

• Will not splinter or break  
• Has a textured surface for better cleaning  
• Perfect balance between flexibility and rigidity  
• Massages interproximal tissue while removing debris and plaque  
• Personalized stickers available with 100pk upon request

Toothpicks vs. Opalpix cleaners.

Use Opalpix interproximal cleaners to clean under and around bonded retainers and brackets.

| 266 | Universal Dentin Sealant Syringe 4pk  
| 1.2 ml syringes |

| 6600 | Opalpix 12pk  
| Each pk contains 32 Opalpix cleaners. |

| 5590 | Opalpix 100pk  
| Each pk contains 32 Opalpix cleaners. |
TIPS AND SYRINGES

RESTORATIVE
Black Micro FX
Black Mini
Black Mini Brush
Black Micro
Blue Micro
Blue Mini Dento-Infusor
ExperTemp Mixing
Inspiral Brush
Intraoral Tip
Metal Dento-Infusor
Micro Capillary
Micro 20 ga
Micro 20 ga FX
SoftEZ
SST
Mixing
White Mac
White Mini Laser

SYRINGES
Skin Syringe
Empty Syringes
Syringe Covers

ENDODONTICS
Capillary
Endo-Eze Irrigator
Micro Capillary
Endo-Eze
NaviTip
NaviTip 31 ga
NaviTip FX

IMPRESSIONS
Mixing
IntraOral Impression
Dynamic Mixing

ACCESSORIES
Micro Applicators
Luer Lock Cap
Syringe Organizer

BRITNEA AUBERBACH
Brighton, Utah

95
ULTRADENT® TIPS DESIGNED TO DELIVER

Check out our tips with LOK-TITE®. Luer Lock tips with Lok-Tite feature double threads that lock the tip into place for increased security, and wings for easy attachment and removal.

**Black Micro® FX Tip**
- Accommodates various viscosities
- Flocked tip fans out to spread materials in a thin, uniform layer

Designed for: PrimaDry® and PermaSeal®.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Micro FX 22 ga</td>
<td>1357</td>
<td></td>
</tr>
</tbody>
</table>

**Black Micro® Tip**
- Provides pinpoint precision
- Narrow cannula accurately delivers materials

Designed for: Ultra-Blend® plus, and EtchArrest®.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Micro 22 ga</td>
<td>194</td>
<td>1085</td>
</tr>
</tbody>
</table>

**Black Mini® Tip**
- Dispenses large volumes
- Opaque plastic preserves the flow of light-cured materials

Designed for: Ultra-Blend® plus, Ultradent® LC Block-Out Resin, PermaFlo®, TriAway™ Adapter, UltraTemp®, Opalescence® Boost®, Ultradent® Diamond Polish Mint, OpalDam®, Opalescence® Endo, and OraSeal® Caulking.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Mini</td>
<td>196</td>
<td>514</td>
</tr>
</tbody>
</table>

**Blue Micro® Tip**
- Provides pinpoint precision
- Narrow cannula accurately delivers materials


<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Micro 25 ga</td>
<td>158</td>
<td>127</td>
</tr>
</tbody>
</table>

**Black Mini® Brush Tip**
- Precise, controlled delivery of aqueous materials
- Tight, adjustable brush fibers minimize bubbles
- Unique to Ultradent

Designed for: Consepsis®, Peak® SE, PermaQuick® Primer, Seek®/Sable® Seek®, Ultradent® Silane, and Ultradent® Universal Dentin Sealant.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Mini Brush</td>
<td>190</td>
<td>1169</td>
</tr>
</tbody>
</table>

**Blue Mini® Dento-Infusor® Tip**
- Offers the same tissue management benefits as the Metal Dento-Infusor® tip
- Allows controlled flow of drop-sized quantities


<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>mm</th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Mini Dento-Infusor</td>
<td>1.20</td>
<td>128</td>
<td>1086</td>
</tr>
</tbody>
</table>

The chemistries you use are different. Some are chemically activated, needing to be mixed immediately before delivery. Others have varying viscosities. Some work in pits and fissures, some inside canals, and some on smooth surfaces. Each chemistry you use is designed for a specific purpose. Shouldn’t the same be true for your tips?

Ultradent makes tips designed to deliver each chemistry we create. Whether you’re delivering a flowable composite, a viscous gel, or thick impression material, we make the perfect tip for the job. And since our tips are engineered on-site, we test each design to ensure it works perfectly with the chemistry it’s intended for.
**ExperTemp® Mixing Tip**
- Mixes and delivers in one action

Designed for: ExperTemp®.

<table>
<thead>
<tr>
<th><strong>LOK-TITE®</strong></th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExperTemp Mixing</td>
<td>6346</td>
<td></td>
</tr>
</tbody>
</table>

**Inspiral® Brush Tip**
- Delivers viscous or filled materials smoothly via an internal helical channel and ridge
- Tight, adjustable brush fibers minimize bubbles

Designed for: Composite Wetting Resin, Peak® Universal Bond, PermaQuick®, PQ1®, Ultradent® Porcelain Etch, Ultra-Etch®, UltraSeal XT®, plus, and UltraSeal XT® hydro.

<table>
<thead>
<tr>
<th><strong>LOK-TITE®</strong></th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspiral Brush</td>
<td>710</td>
<td>123</td>
</tr>
</tbody>
</table>

**Metal Dento-Infusor® Tip**
- Places hemostatic agents precisely and effectively removes superficial coagulum
- Blunt, bent cannula with padded brush enables gentle pressure on the sulcus
- Ultradent’s first tip, the “MDI” remains paramount for successful tissue management


**Micro Capillary™ Tips**
- Bright color is easily identified against soft tissues
- The world’s smallest molded tips

Designed for: Ultracare®, periodontal materials, and the Ultradent® Luer Vacuum Adapter.

<table>
<thead>
<tr>
<th><strong>LOK-TITE®</strong></th>
<th>mm</th>
<th>20pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro Capillary 0.008&quot;</td>
<td>5 mm</td>
<td>1120</td>
</tr>
<tr>
<td>Micro Capillary 0.008&quot;</td>
<td>10 mm</td>
<td>1121</td>
</tr>
</tbody>
</table>

**Intraoral Tip**
- Allows precise placement
- Attaches to dual-barrel mixing tips

Designed for: PermaFlo®.

<table>
<thead>
<tr>
<th><strong>LOK-TITE®</strong></th>
<th>20pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intraoral</td>
<td>5922</td>
</tr>
</tbody>
</table>

**Micro 20 ga Tip**
- Large-gauge cannula enables consistent flow
- Standard flowable composite delivery tip

Designed for: MTAFlow®, PermaFlo®, PermaFlo® Purple, OpalDam®, and OpalDam® Green.

<table>
<thead>
<tr>
<th><strong>LOK-TITE®</strong></th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro 20 ga</td>
<td>1168</td>
<td>1252</td>
</tr>
</tbody>
</table>
## TIPS - RESTORATIVE

### Micro 20 ga FX® Tip
- Standard flowable delivery tip
- Flocked fibers fan out to evenly spread material over the entire surface

Designed for: Opalescence® Boost®.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro 20 ga FX</td>
<td>1405</td>
</tr>
</tbody>
</table>

### Ultradent® Mixing Tip
- Mixes and delivers in one action

Designed for: UltraTemp® REZ, UltraTemp®, EndoREZ®, and PermaFlo® DC.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>20pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultradent Mixing</td>
<td>5920</td>
</tr>
</tbody>
</table>

### SoftEZ® Tip
- Tip fibers provide visible, controlled delivery
- Brush fibers facilitate smooth application

Designed for: Enamelast®.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>50pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>SoftEZ</td>
<td>4712</td>
<td>4711</td>
</tr>
</tbody>
</table>

### White Mac™ Tip
- Dispenses large volumes
- All-plastic delivery tip
- Greater angle for easy intraoral delivery

Designed for: OraSeal® Caulking, OraSeal® Putty, Consepsis® Scrub, and Opalustre®.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Mac</td>
<td>661</td>
<td>1361</td>
</tr>
</tbody>
</table>

### SST™ - Surgical Suction Tip
- Ideal for delicate surgeries
- Large-diameter tip opening

Designed for: Ultradent® Luer Vacuum Adapter for small periodontic or endodontic surgeries and controlled suction of Opalescence® Boost®.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>20pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>SST</td>
<td>1248</td>
</tr>
</tbody>
</table>

### White Mini™ Laser Tip
- Dispenses large volumes
- All-plastic delivery tip
- Easily dispenses viscous chemistries

Designed for: OraSeal® Caulking®, OraSeal® Putty, Consepsis® Scrub, and Opalustre®.

<table>
<thead>
<tr>
<th>LOK-TITE®</th>
<th>20pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Mini Laser</td>
<td>1247</td>
</tr>
</tbody>
</table>
Skini Syringe
- Generates pressure in the syringe with low force to the plunger, resulting in more precise apical delivery
- Low waste

Designed for: EndoREZ® and PermaFlo® DC.

<table>
<thead>
<tr>
<th>0.5 ml Skini Syringe</th>
<th>20pk</th>
<th>50pk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1680</td>
<td>1681</td>
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</tbody>
</table>

1.2 ml Empty Syringe
- Snug Luer Lock threads prevent tips from popping off

Designed for: All 30 ml IndiSpense® syringes.

<table>
<thead>
<tr>
<th>1.2 ml Empty Syringe</th>
<th>20pk</th>
<th>100pk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>124</td>
<td>157</td>
</tr>
</tbody>
</table>

ViscoStat® Empty Syringe
- Snug Luer Lock threads prevent tips from popping off
- Colored plastic is light sensitive to preserve chemistry

Designed for: 30 ml IndiSpense syringes of ViscoStat®, ViscoStat® Clear, Astringedent®, and Astringedent® X.

<table>
<thead>
<tr>
<th>1.2 ml ViscoStat Empty Syringe</th>
<th>20pk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1278</td>
</tr>
</tbody>
</table>

5 ml Syringe
- Syringe barrel flanges positioned for optimum control/leverage

Designed for: Irrigants for in-office or dentist-supervised procedures, as well as Capillary tip, ChlorCld®, Ultradent® Citric Acid, Ultradent® EDTA 18% Solution, and Consepsis®.

<table>
<thead>
<tr>
<th>5 ml Syringe</th>
<th>10pk</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>201</td>
</tr>
</tbody>
</table>

Ultra-Etch® Empty Syringe
- Snug Luer Lock threads prevent tips from popping off
- Blue color makes identification easy

Designed for: 30 ml IndiSpense syringes of Ultra-Etch®.

<table>
<thead>
<tr>
<th>1.2 ml Ultra-Etch Empty Syringe</th>
<th>20pk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>129</td>
</tr>
</tbody>
</table>

Ultradent® Syringe Cover
- Provides an easy, reliable barrier
- Ensures asepsis of syringe during cleanup

Designed for: All 1.2 ml syringes.

<table>
<thead>
<tr>
<th>1.2 ml Syringe Cover</th>
<th>300pk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>249</td>
</tr>
</tbody>
</table>
**TIPS - ENDODONTIC**

**Capillary Tips**
- Evacuates canals and substantially minimizes use of paper points
- Narrow, flexible taper accesses curved canals

Attach to the Ultradent® Luer Vacuum Adapter for moisture removal from endodontic canals.

<table>
<thead>
<tr>
<th>LOK-TITE™</th>
<th>mm</th>
<th>20pk</th>
<th>50pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capillary 0.014&quot;</td>
<td>0.36 mm</td>
<td>341</td>
<td>3099</td>
</tr>
<tr>
<td>Capillary 0.019&quot;</td>
<td>0.48 mm</td>
<td>186</td>
<td>1425</td>
</tr>
</tbody>
</table>

**Endo-Eze™ Irrigator Tip**
- Provides ideal reach reducing risk of expressing chemicals past the apex
- Comes with a flexible, blunt cannula with a unique, anti-obturating end
- Non-sterile

Designed for: ChlorCid®, ChlorCid® V, and Ultradent® 5 ml syringe.

<table>
<thead>
<tr>
<th>mm</th>
<th>20pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endo-Eze Irrigator 27 ga</td>
<td>25</td>
</tr>
</tbody>
</table>

**Micro Capillary™ Tips**
- Bright color is easily identified against soft tissues
- The world’s smallest molded tips

Designed for: Ultracare®, periodontal materials, and the Ultradent® Luer Vacuum Adapter.

<table>
<thead>
<tr>
<th>LOK-TITE™</th>
<th>mm</th>
<th>20pk</th>
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<tbody>
<tr>
<td>Micro Capillary 0.008&quot;</td>
<td>5 mm</td>
<td>1120</td>
</tr>
<tr>
<td>Micro Capillary 0.008&quot;</td>
<td>10 mm</td>
<td>1121</td>
</tr>
</tbody>
</table>

**Endo-Eze™ Tips**
- Great for endodontic procedures
- Flexible, strong cannulae
- Bend easily

Designed for: Luting materials and air/water delivery. Use with: TriAway™ Adapter, PermaFlo® DC, and other Ultradent syringes.

<table>
<thead>
<tr>
<th>mm</th>
<th>20pk SKU</th>
<th>100pk SKU</th>
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<tr>
<td>Endo-Eze 22 ga - 0.028&quot;</td>
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<td>348</td>
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<tr>
<td>Endo-Eze 20 ga - 0.035&quot;</td>
<td>0.90 mm</td>
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<tr>
<td>Endo-Eze 19 ga - 0.042&quot;</td>
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<tr>
<td>Endo-Eze 18 ga - 0.049&quot;</td>
<td>1.25 mm</td>
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</table>

**ChlorCid™**

Organic Tissue in the Canal

When in the canal, ChlorCid and ChlorCid V solutions dissolve soft tissue and act as a file lubricant. When either solution comes into contact with organic tissue it releases chlorine, which has strong antimicrobial properties that kill bacteria and prevent bacterial rebound by oxidizing the enzymes essential to bacterial regrowth.

**See Page 34**
NaviTip® Tips

- Provide controlled delivery to the apex
- Flexible, stainless steel cannulae easily navigate curved canals

29 ga delivers paste materials: MTAFlow™, EndoREZ® and UltraCal XS®.
30 ga delivers solutions/gels:
File-Eze®, Ultradent® EDTA 18% Solution, ChlorCid®, ChlorCid® V, Consepsis®, Consepsis® V, and Ultradent® Citric Acid 20% Solution.

NaviTip® 31 ga Tip with Double Sideport Irrigator

- Double sideports deliver irrigants safely, minimizing the possibility of chemicals being expressed past the apex
- One of the world’s smallest cannula navigates the most intricate canal spaces

Designed for: ChlorCid®, ChlorCid® V, ChlorCid® Surf, Ultradent® EDTA 18% Solution, Ultradent® Citric Acid 20% Solution, and Consepsis®.

Listed as an “EXCELLENT” product by a prominent independent research institute.¹

NaviTip® FX® Tip

- One-of-a-kind brush cleans, scrubs, and irrigates simultaneously
- Rigid cannula

Designed for: Ultradent® Citric Acid 20% Solution.

Mixing Tips
- Enable direct delivery of impression materials
- Automixing, disposable, and color coded

Designed for: Thermo Clone® VPS and Chromaclone® PVS.

<table>
<thead>
<tr>
<th></th>
<th>50pk</th>
</tr>
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<tbody>
<tr>
<td>Mixing Tips Yellow</td>
<td>2902</td>
</tr>
<tr>
<td>Mixing Tips Pink</td>
<td>2903</td>
</tr>
<tr>
<td>Mixing Tips Green</td>
<td>2904</td>
</tr>
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</table>

Ultradent® Micro Applicators
- Bend easily
- Apply small amounts accurately
- Standard size

The micro applicator is composed of small nonlinting, nonabsorbent fibers that suspend solutions, creating a nondripping sphere.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Micro Applicator Brush 400pk</td>
<td>200 x Each color</td>
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</table>

IntraOral Impression Tip
- Allows precise placement
- Attaches to mixing tips

Designed for: Thermo Clone® VPS and Chromaclone® PVS.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>IntraOral Impression</td>
<td>2906</td>
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</table>

Luer Lock Cap
- Winged, polypropylene, plastic luer lock cap
- Use to seal syringes loaded in the office

Designed for: All Ultradent® plastic syringes.

<table>
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<td>Luer Lock Cap</td>
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</table>

Dynamic Mixing Tip
- Easily and securely locks on cartridge
- Provides consistent mixing of base and catalyst

Designed for: Thermo Clone® VPS 380 ml cartridges.

<table>
<thead>
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<tbody>
<tr>
<td>Dynamic Mixing</td>
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Syringe Organizer
- Holds 14 syringes
- Made of clear acrylic

Designed for: Mosiac®.

<table>
<thead>
<tr>
<th></th>
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<tr>
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</table>
TISSUE MANAGEMENT

Dento-Infusor Tips
ViscoStat
ViscoStat Clear
Astringedent
Astringedent X
Astringedent Spot Remover
Ultrapak
Fischer’s Ultrapak Packers
Ultradent Slide Packers
FOR HEMOSTASIS AND FLUID CONTROL

For more than 40 years dentists have trusted the immediate hemostatic power, detailed margins, and elimination of surface bleeding and sulcular fluid provided by using Ultradent’s tissue management products. Our complete line of solutions continuously sets the standard for superior control and predictability while offering dentists fast, reliable, and affordable products.

Unparalleled tissue management starts with rapid, profound hemostasis. For continuous control of bleeding and sulcular fluid, no one offers a more complete line of solutions.

FERRIC SULFATE - ACTIVE HEMOSTASIS

1. Burnish hemostatic agents firmly against sulcus until bleeding stops and no more coagulum forms.
2. Using the Dento-Infusor® tip with padded scrub brush, scrub firmly to infuse hemostatic and clean cut sulcus.
3. Apply firm air/water spray to remove residual coagulum and test tissue for quality, profound hemostasis. If bleeding continues, repeat infusion technique.
4. After complete hemostasis has been reached, excellent retraction is achieved using Ultrapak® knitted cord placed with the Ultrapak® packer.

Reduce cross-contamination and need for sterilizing by loading unit dose directly from IndiSpense® syringe.

VISCOSTAT® HEMOSTATIC IS KEY TO QUALITY DIRECT AND INDIRECT RESTORATIONS

Contralateral molars removed for maxillofacial surgery. Crowns fabricated by same technician. Different dentists made impressions.

GOOD T.M.

BAD T.M.

Timeline:

<table>
<thead>
<tr>
<th>0</th>
<th>1 min.</th>
<th>2 min.</th>
<th>3 min.</th>
<th>4 min.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleeding</td>
<td>Rub hemostatic agent firmly with Dento-Infusor tip</td>
<td>Clean sulcus with air/water spray</td>
<td>If necessary, repeat hemostatic application</td>
<td>Perform final cleaning/testing with firm air/water spray</td>
</tr>
</tbody>
</table>

“Tissue management is especially so. Done right, it’s gorgeous! You see results almost immediately. Done wrong, the bleeding doesn’t stop, and you end up with that awful coagulum everywhere.”

—DR. DAN FISCHER, DDS
FOR INDIRECT BONDING (LUTING)

**PROVISIONAL REMOVED**

1. Well-healed tissue 2 weeks post-op.

**CONTAMINATION**

2. Sulcular fluids contaminate bonding materials/preparation when not controlled.

**SEAL/DRY**


**PREP SCoured**

4. Scour off hemostatic agent and residual temporary cement with Consepsis® Scrub, prepare site for application of any dentin bonding agent, including self-etching systems.

**WASH/DRY**

5. Wash and dry. Tissue stays dry.

**SEAT RESTORATION**

6. Preparation ready for final cementation.

Note: Perfect sulcular fluid control is mandatory if bonding and luting is adjacent to gingival sulcus.¹

FOR DIRECT BONDING

**MICROLEAKAGE**

1. Several Class V restorations were performed on these anterior teeth 2 months prior. Inadequate tissue management or inadequate removal of hemostatic and/or blood contaminants resulted in microleakage on maxillary right central incisor.

**STAINING**

2. With microleakage, blood pigments move into space between preparation and restoration and stain interface.

**ISOLATION**

3. Isolate tissues with Ultrapak® cord soaked in hemostatic solution. Firmly air/water spray/rinse excess hemostatic from cord, tissues, and tooth surfaces to prevent contamination and resultant leakage.

**RESTORATION**

4. Replaced Class V restoration 3 months post-op.

**CONTROL**

1. For Class V restorations, ViscoStat hemostatic and Ultrapak cord are ideal for controlling blood and sulcular fluids and can also protect tissue from burs. Use a firm air/water spray to remove excess hemostatic solution.

**BOND**

2. Successful bonded restoration.

**INDIRECT VENEER RETRACTION**

1. Packing Ultrapak cord quickly displaces tissues and improves access for indirect veneer luting.

---

FOR IMPRESSION MAKING

An astringent is a substance that eliminates permeability of epithelium to tissue fluid flow. The result is a dry field, an important tissue management solution. An ideal impression for successful crowns, veneers, and bridges must accurately capture the preparation margins. This can be ensured only through reliable hemostasis and gingival displacement.

Bleeding

1. Subgingival preparation with bleeding.

Cleaning/Testing

2. Burnish Astringedent® X hemostatic firmly against bleeding tissues with Metal Dento-Infusor® tip.

3. Firm air/water spray removes residual coagulum and tests tissue for quality, profound hemostasis.

Drying/Testing


Make Impression

5. Remove Ultrapak knitted cord, follow with a firm air/water spray and dry.

6. Deliver Thermo Clone VPS impression material.

Result

7. Predictable quality impressions.

FOR VITAL PULPOTOMY IN PRIMARY TEETH

- EXPANDED APPLICATION

Hemostasis

1. Control bleeding. Use Dento-Infusor tip with ViscoStat or Astringedent® hemostatics.1-4

2. Apply a sustained antibacterial like ZOE in a thin layer.

Astringent is a substance that eliminates permeability of epithelium to tissue fluid flow. The result is a dry field, an important tissue management solution. An ideal impression for successful crowns, veneers, and bridges must accurately capture the preparation margins. This can be ensured only through reliable hemostasis and gingival displacement.

Eugenol Barrier

3. Create a eugenol barrier.* Apply a thin layer of Ultra-Blend plus liner because eugenol inhibits most resin polymerization.

4. Use flowable and/or paste composite as desired.

Note: Apply ZOE and Ultra-Blend® plus liner in minimal thickness to keep maximum dentin available for bonding.

Note: Remove all hemostatic and extraneous coagulum prior to placement of the thin layer of ZOE.

Bond

5. Apply Peak® Universal Bond adhesive.

6. Use flowable and/or paste composite as desired.

References:


Tip infuses hemostatic agent into capillaries, forming a cork-like “plug,” then cleans coagulum away.

As a rule, the Metal Dento-Infusor device is the tip of choice for use with ViscoStat®, ViscoStat® Clear, Astringedent® and Astringedent® X hemostatic agents. It can be used with enough pressure to infuse the capillaries with the hemostatic agent. If only control of sulcular fluid is required, the softer tip end of the plastic Blue Mini® Dento-Infusor® tips may be gentler on the newly healed epithelium at the time of bonding subgingival definitive restorations.

Both infusors allow hemostatic agents to be scrubbed into the tissue in a targeted and sparing way, which is not possible with other means such as cotton pellets, micro brushes, and special brushes.

Dento-Infusor® Tips

Using the correct tip is essential to achieving profound, dependable hemostasis and sulcular fluid control.

Hemostatic agents are only as good as their delivery systems. Dento-Infusor tips infuse hemostatic agents into bleeding capillaries. The padded brush end rubs the agent into capillaries and wipes coagulum away. The result is a clean, dry preparation ready for impressions.
ViscoStat®
20% FERRIC SULFATE

- Creates profound hemostasis
- Stops bleeding in seconds, saving chair time
- Does not impede hard or soft tissue healing
- Eliminates sulcular fluid contamination for optimal bonding
- Decreases costly impression remakes

ViscoStat hemostatic is a 20% ferric sulfate equivalent hemostatic agent with inert binding agents in a viscous, aqueous solution. It contains fumed silica to limit the acidic activity, making it kind to hard and soft tissue.

ViscoStat hemostatic solution is suited for a variety of dental and oral surgery procedures to arrest surface capillary bleeding. Such procedures include fixed prosthodontics, restorative-operative, periodontal treatment, etc. ViscoStat hemostatic is also recommended for retrofillings, canine impactions, gingivectomies, and as a “fixative” for pulpotomies.

Tip: Prevent leakage caused by sulcular fluid contamination during direct bonding procedures. Soak an Ultrapak® knitted cord in hemostatic and isolate the tissues. Follow with a firm air/water spray.

Note: Do not use epinephrine preparations with ferric sulfate products (ViscoStat, Astringedent), as blue/black precipitate will occur.

“ViscoStat hemostatic has allowed me to take clean, dry, accurate impressions even in some of the most hemorrhagic situations. Thank you! I appreciate it, my lab man appreciates it, and my patients appreciate it.”
—DR. MONTE PERSON – FRESNO, CA

“ViscoStat hemostatic can stop bleeding in the cervical area of a crown prep like nothing else I have ever seen! It is a miracle solution! I wish I knew how many thousands of hours it has saved me over the years. Thank you, Ultradent!”
—DR. SCOTT J. HADLEY – HAXTUN, CO

“Without a doubt I would be lost without ViscoStat hemostatic! It quickly stops sulcular bleeding, allowing me to place the Ultrapak #000 cord and get an excellent impression on the first try. It is also great to use when bonding composites near gingival tissues. ViscoStat hemostatic is a vital part of my crown prep and composite armamentarium.”
—DR. JULIE ANN ROUTHIER – SAVANNAH, GA
THE CLEAR

APPROACH TO HEMOSTASIS

• SPECIALLY DESIGNED for the esthetic zone
• LEAVES NO RESIDUE and rinses off easily
• TRANSPARENT GEL stays on the sulcus
• DOES NOT INTERFERE with bonding

ViscoStat® Clear
25% aluminum chloride
ViscoStat® Clear
25% ALUMINUM CHLORIDE

“Viscostat Clear is an essential part of my armamentarium for adhesive restorative procedures. It is a highly effective haemostatic agent and the clear aluminium chloride solution doesn’t interfere with the efficacy of bonding agents and won’t stain the substrates.”
— DR. ANGELO LAZARIS, SYDNEY, AUSTRALIA

- Does not discolor the gingiva
- Stops minor bleeding in the esthetic zone
- Rinses easily
- Viscous gel
- Does not interfere with bonding

ViscoStat Clear hemostatic is a 25% aluminum chloride gel in a viscous, aqueous solution. Its tissue-kind silica formula temporarily eliminates minor bleeding. No coagulum is formed, nor does residue adhere to the preparation, which is especially critical in the esthetic zone. ViscoStat Clear hemostatic will not stain the hard or soft tissues.

ViscoStat Clear hemostatic is intended for sulcus retraction prior to impression making and to control bleeding and gingival oozing in restorative and operative dentistry. It is designed to be used with or without gingival retraction cord and/or the Dento-Infusor tip. The gel facilitates the insertion of the cord into the sulcus.

1. Subgingival preparation and bleeding sulcus.
2. Rub hemostatic firmly against bleeding tissues with the Metal Dento-Infusor® tip. The clear gel allows easy visibility and rinses away quickly.
5. Finished restoration 2 weeks post-op. Facilitates great control in esthetic zone with no gingival stain.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>6409</td>
<td>ViscoStat Clear Dento-Infusor Kit&lt;br&gt;4 x 1.2 ml syringes&lt;br&gt;20 x Metal Dento-Infusor tips</td>
</tr>
<tr>
<td>6407</td>
<td>ViscoStat Clear Dento-Infusor IndiSpense Kit&lt;br&gt;1 x 30 ml IndiSpense syringe&lt;br&gt;20 x Metal Dento-Infusor tips&lt;br&gt;20 x 1.2 ml empty syringes</td>
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<tr>
<td>6410</td>
<td>ViscoStat Clear Syringe 20pk&lt;br&gt;1.2 ml syringes</td>
</tr>
<tr>
<td>6408</td>
<td>ViscoStat Clear IndiSpense Syringe&lt;br&gt;30 ml syringe</td>
</tr>
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</table>

Astringedent®
15.5% FERRIC SULFATE

- The “Classic” hemostatic agent
- Stops bleeding in seconds
- Eliminates sulcular fluid contamination for optimal bonding
- Decreases costly impression remakes

Astringedent hemostatic is an aqueous 15.5% ferric sulfate hemostatic solution with a pH of ~1.0.

“Highly recommended as effective and easy to use for control of bleeding, tissue management, and pulpotomies. Rating+++++.”

Astringedent hemostatic solution is well suited for a variety of dental and oral surgery procedures to arrest bleeding. Astringedent hemostatic can be used to prevent leakage caused by sulcular fluid contamination during direct bonding procedures.

Listed as a “CAN’T LIVE WITHOUT” product by a prominent independent research institute.1

| 111 | Astringedent Bottle 1pk  |
| 686 | Astringedent IndiSpense Syringe 1pk 30 ml |

NOTE: ViscoStat® and Astringedent hemostatic agents are more viscous and should be used with a Metal Dento-Infusor® tip with, as there is less flow through plastic Blue Mini® Dento-Infusor® tip. The plastic Dento-Infusor tip should be used when you are dealing with newly healed epithelium, as the softer tip is slightly less aggressive.

Astringedent® X
12.7% IRON SOLUTION

- Effectively treats difficult-to-stop bleeding
- Is less acidic than competitive iron subsulfate solutions

Astringedent X hemostatic is an aqueous 12.7% iron solution that contains equivalent ferric sulfate and ferric subsulfate that works fast.

Use when a stronger, more potent hemostatic is required and when the attainment of quality hemostasis may be more challenging (e.g., in cases of difficult-to-stop, problem bleeding).

| 112 | Astringedent X Bottle 1pk  |
| 690 | Astringedent X IndiSpense Syringe 1pk 30 ml |

Astringedent® Spot Remover
CLEANING SOLUTION

Astringedent Spot Remover is designed to remove ViscoStat hemostatic, Astringedent hemostatic, and Astringedent X hemostatic stains that will not come out of clothing with soap and water. Not for intraoral use.

| 2160 | Astringedent Spot Remover 1pk 30 ml |

Ultrapak®
KNITTED CORD

• The original knitted cord
• Provides rapid tissue displacement, detailed margins, for quality impressions
• Facilitates easy packing and stays in place better than twisted or braided cord
• Compresses upon packing then expands for optimal retraction
• Does not entangle in diamond bur
• Bright colors facilitate easy identification and removal

Ultrapak cord is made of 100% cotton which has been knitted into thousands of tiny loops to form long, interlocking chains. After hemostasis is achieved this unique knitted design exerts a gentle, continuous outward force following placement as the knitted loops seek to open. Optimal tissue displacement occurs in 1–3 minutes.

Ultrapak cord can also be used to deliver ferric sulfate solutions subgingivally for sulcular fluid control. Ultrapak cord is designed to enhance tissue management techniques that use ViscoStat® and Astringedent® hemostatics. Conventional techniques using alum, aluminum chloride, etc. are also enhanced when using Ultrapak plain knitted cords, which carry significantly greater quantities of hemostatic solution than conventional cords.

THE ONE WITH THE STRIPE®

With easy packing, excellent absorption, and exceptional retention, the proprietary knitted design of the Ultrapak cord has been the preferred choice for years.

Listed as a “CAN’T LIVE WITHOUT” product by a prominent independent research institute.

ULTRAPAK® COMPETITOR ABSORPTION COMPARISON
Data shows Ultrapak® knitted cord vs. leading competitors’ absorption abilities.*

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<thead>
<tr>
<th>Material</th>
<th>0</th>
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<tbody>
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<td>GingiBraid***</td>
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<td>GingiKnit***</td>
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<td>GingiPak® Z Twist***</td>
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<td>SiliTrax® Plain**</td>
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<td>Ultrapak®</td>
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<td>Stat-Pak***</td>
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<tr>
<td>Proretract***</td>
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</tbody>
</table>

* Date on file. ** Trademark of a company other than Ultradent. 1. realityesthetics.com. Note: Do not use Ultrapak E knitted cord or other epinephrine preparations with ferric sulfate solutions, including ViscoStat, Astringedent, and Astringedent X hemostatics, as a blue/black precipitate will occur. Ultrapak knitted cord with epinephrine is not available in all countries. 3. “Can’t Live Without” Clinical Research Associates Newsletter, Volume 21, Issue 7, July 1997.
**TISSUE MANAGEMENT**

**Preparation Packing Technique**

To ensure cord retention during preparation, use a cord large enough to firmly compress into sulcus.

**PrePack**

1. Place Ultrapak® knitted cord soaked in hemostatic solution using a cord size that appears slightly too large to ensure cord retention. The thin Ultrapak® Packer quickly slips cord into position. The knitted cord’s unique design (interlocking loops) facilitates easy packing and locks it into place.

2. Extend margin subgingivally by cutting partway into knitted cord, which won’t entangle in diamond bur. Remove remnant of cord with an explorer or other instrument. Bleeding is minimal if at all. A small portion of uncut tooth above gingival attachment is preserved to record in impression. If additional retraction is required, repack with appropriately sized cord. Rinse, air dry, and make impression.

**Preparation**

1. Once hemostasis is achieved, carefully place a single cord—such as Ultrapak® knitted cord #0 or #00—as deep as possible into the sulcus. Use Fischer’s Ultrapak Packers to place cords properly and efficiently.

2. Place a second, thicker cord soaked in a hemostatic agent to expand the tissue laterally.

**Rinse/Dry**

3. Rinse the area well, lightly dry, and make impression.

**FOR DIGITAL IMPRESSIONS - COMPLETE HEMOSTASIS**

**Hemostasis**

1. Complete hemostasis is essential, especially when taking digital impressions, for the most accurate marginal fit of any restoration.

2. After hemostasis is achieved and tissue is retracted, preparation is ready for digital impression.

**Clear Field**

1. Complete hemostasis is essential, especially when taking digital impressions, for the most accurate marginal fit of any restoration.

2. After hemostasis is achieved and tissue is retracted, preparation is ready for digital impression.

"Ultrapak cord is excellent at displacing the gingival tissue and allowing proper hemostasis, and is easy to place and remove. It works very well for all retraction purposes. The different sizes are good for all situations."

—Dr. Y. Clement Shek – San Francisco, CA

"In dentistry, time is money. Ultrapak cord’s woven design makes packing the cord quick and easy, plus the tooth can be prepped or touched up without snagging the cord. This increases patient comfort in shortening the appointment with far less repeat impressions."

—Dr. Thomas J. Frankfurth – Tampa, FL

"Ultrapak cord has taken the stress out of cord packing. This was the most frustrating part of my day when I was using other products. Add the amazing Astringedent hemostatic and… LIFE IS GOOD!"

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### TISSUE MANAGEMENT

- **Non-impregnated #1 and #2 sizes are particularly effective for tissue control and/or displacement when soaked in coagulative hemostatic solution prior to and/or after crown preparations.**
- **Protective “pre-preparation” cord on anteriors.**

#### Ultrapak Kit
- 1 x Each #00, 0, 1, and 2 cord
- 1 x Ultrapak organizer

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Code</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>130</td>
<td>Ultrapak Kit</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>Ultrapak Cord #000 Regular 1pk</td>
<td>137</td>
<td>Lower cord in the “double-cord” technique, Anterior teeth</td>
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<tr>
<td>136</td>
<td>Ultrapak Cord #00 Regular 1pk</td>
<td>136</td>
<td>Preparing and cementing veneers, Restorative procedures dealing with thin, friable tissues</td>
</tr>
<tr>
<td>131</td>
<td>Ultrapak Cord #0 Regular 1pk</td>
<td>131</td>
<td>Lower anterior, When luting near gingival and subgingival veneers, Class III, IV, and V restorations, Upper cord for use with the “double-cord” technique</td>
</tr>
<tr>
<td>132</td>
<td>Ultrapak Cord #1 Regular 1pk</td>
<td>132</td>
<td>Upper cord for “double-cord” technique, Protective “pre-preparation” cord on anteriors</td>
</tr>
<tr>
<td>133</td>
<td>Ultrapak Cord #2 Regular 1pk</td>
<td>133</td>
<td>Upper cord for use with the “double-cord” technique</td>
</tr>
<tr>
<td>134</td>
<td>Ultrapak Cord #3 Regular 1pk</td>
<td>134</td>
<td>Areas that have fairly thick gingival tissues where a significant amount of force is required, Upper cord for use with the “double-cord” technique</td>
</tr>
</tbody>
</table>

Each bottle contains 8 ft/244 cm of cord.
Fischer’s Ultrapak® Packers
THIN SERRATED PACKING INSTRUMENTS

These specially designed packers ease the packing of Ultrapak® knitted cord. Their thin edges and fine serrations press into the cord, preventing it from slipping off and reducing the risk of cutting the gingival attachment.

45° TO HANDLE: Our most popular packers, with heads at 45° to the handle and three packing sides. Circular packing of the prep can be completed without the need to flip the instrument end to end. Use the small packer on lower anteriors and upper lateral incisors.

90° AND PARALLEL TO HANDLE: Same size design as the 45° to handle packer, except one of the heads is in line with the shank and the other is at a right angle to the shank.

“Ultrapak Packers help place the cords properly in a quick and efficient manner. Thanks to the inventors!”
— DR. JOHN LUI – BELLEVUE, WA

#170 and #171 (45° to handle)
#172 and #174 (90° and parallel to handle)

Ultradent® Slide Packers
THIN, CIRCULAR, NON-SERRATED PACKING INSTRUMENTS

These thin, non-serrated slide packers are designed to place and compress cord with a sliding action as the clinician places cord around the prep. The thin head presses into the cord, and the smooth, circular head allows placement of cord in a sliding motion around the preparation without lifting the instrument from the cord.

834 Small Slide Packer (45° to handle) 1pk
833 Regular Slide Packer (45° to handle) 1pk

171 Small Packer (45° to handle) 1pk
170 Regular Packer (45° to handle) 1pk
174 Small Packer (90° to handle) 1pk
172 Regular Packer (90° to handle) 1pk
Kam, from the Bahamas, smiles when he sees his daughter. Opalescence® Boost® in-office whitening is perfect to quickly whiten his smile in about an hour.

Opalescence Boost Whitening A bright smile in under an hour!
Questions Behind Tooth Whitening
Whitening Treatment Protocol
Opalescence Tooth Whitening Reference Guide
Opalescence Carbamide vs. Hydrogen Peroxide Concentrations
Opalescence PF 10%, 16%, 20% and 35%
Opalescence Shade Guide Cards
Opalescence Pocket Tray Cases
Opalescence Go 6%, 10% and 15%
Ultradent LC Block-Out Resin
UltraEZ
Sof-Tray Classic Sheets
Ultradent Ultra-Trim Scalloping Scissors
OpalDam/OpalDam Green
Opalescence Boost 40%
IsoBlock
Opalescence Endo
Opalustre
OpalCups

Case Study: Opalustre
Nidia, from the United States—a hairstylist, gamer, and athlete—smiles because she loves to be herself. Opalescence Go® prefilled whitening trays are the perfect way to whiten on her busy schedule. For many patients a brighter, whiter smile is all they need to shine. That’s the power of a smile.
WHITEN YOUR SMILE - Questions Behind Tooth Whitening

There are many causes of tooth staining. Certain medicines, tooth trauma, root fillings, and foods and beverages can cause tooth discoloration over time. Some discolorations are superficial, while others are internal. Both can be effectively treated by a dentist. Professional whitening is the best option to safely lighten discolored teeth.

**HOW DOES WHITENING WORK?**
During the whitening treatment, hydrogen and carbamide peroxide change to form reactive oxygen species. These penetrate the tooth and break down the stain molecules to change their optical properties. This interaction transforms the color molecules, making the tooth appear more white.

Reactive oxygen species are able to migrate throughout the tooth, so there is no need for the entire surface of the tooth to be in contact with the whitening agent for the entire tooth to be whitened.

Because the reactive oxygen needs to dissipate from the tooth before bonding, it is necessary to wait 7–10 days before any bonding procedure.

**HOW LONG DO WHITENING RESULTS LAST?**
Whitening results are very stable. However, depending on your diet and lifestyle habits, whitening may need to be redone periodically. Due to the safety of the whitening agents, this should not cause any concerns.

**WILL WHITENING AFFECT TOOTH SENSITIVITY?**
Tooth sensitivity can occur as a result of whitening. If sensitivity occurs, it is transient and disappears after the completion of whitening treatments. If desensitizing treatments are desired, we recommend the use of UltraEZ® desensitizing gel or Enamelast fluoride varnish. Opalescence® Whitening Toothpaste Sensitivity Formula can also be used to help prevent or lessen sensitivity if it occurs.

**WILL WHITENING CAUSE TOOTH SENSITIVITY?**
No. Tooth whitening has not been shown to weaken tooth enamel.2-9

**IMPORTANT:**
DENTIST SUPERVISION IS THE BEST WAY TO WHITEN!
Tooth whitening treatments are effective and safe if they are used appropriately and with the correct materials. This includes a comprehensive exam, briefing on the chosen whitening process, and monitoring of the patient during the treatment phase. Self-treatment by the patient with over-the-counter (OTC) products often does not provide the results desired, and leaves the patient without options for managing potential sensitivity or other concerns.


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**WHITEN YOUR SMILE - Questions Behind Tooth Whitening**

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**WILL WHITENING AFFECT BOND STRENGTH?**
Even though whitening agents release oxygen into the tooth, existing bonds are not weakened.1,2

**Note:** Allow a period of 7–10 days after whitening treatment before bonding. The high concentration of oxygen in the tooth could have a significant adverse effect on polymerization of the resins.3,4
Whitening Treatment Protocol
We recommend the following steps for professional whitening evaluation and treatment.

1. **TAKE PATIENT’S MEDICAL HISTORY**
Pregnant or breastfeeding women should not whiten. Patients with serious health concerns should consult their primary care provider prior to treatment.

2. **PERFORM DENTAL EXAM**
Determine origin of staining, evaluate gingival and dental health. Check for restorations in the esthetic zone that may not match after whitening. Discuss changing them out or resurfacing after whitening.

3. **MANAGE PATIENT’S EXPECTATIONS**
Discuss the possibilities and limitations of whitening for their specific circumstance and help them to establish realistic expectations.

4. **PERFORM HYGIENE TREATMENT**
Proceed to the hygiene treatment. Use polishing paste to remove all plaque. For patients with known sensitivity, wait 3–5 days before beginning whitening treatment.

5. **DETERMINE THE INITIAL TOOTH COLOR**
Identify the initial tooth color with the aid of a shade guide. Take a photograph with shade tab after hygiene treatment.

6. **CREATE WHITENING TREATMENT PLAN**
Multiple Opalescence® whitening products may be used as part of the whitening treatment plan to help the patient achieve their desired results. If patient has a history of tooth sensitivity, add a desensitizing protocol prior to the whitening treatment and consider using a lower concentration of gel and/or reduced wear time. Additionally, if patient tolerates whitening treatments without sensitivity, consider providing a higher concentration gel for more rapid results.

7. **OBTAIN PATIENT’S CONSENT**
Have the patient sign a whitening consent form that outlines the whitening treatment and cost involved.

8. **EDUCATE PATIENT**
Tooth whitening results can last a year or more. Depending on the patient’s nutrition and lifestyle habits, whitening may need to be repeated periodically to maintain the look they desire. Instruct patient how to use the chosen whitening products and answer any questions or concerns.

9. **DETERMINE THE FINAL TOOTH COLOR**
Identify the final tooth color using the shade guide. Take a photograph with initial and final shade tab. A definitive color change should only be recorded a few days after the end of the treatment, as the teeth may continue to whiten after the final whitening treatment.

10. **PROVIDE SENSITIVITY MANAGEMENT IF NECESSARY**
Some patients may experience lingering sensitivity. We recommend using UltraEZ® desensitizing gel or Enamelast® fluoride varnish. Opalescence® Whitening Toothpaste Sensitivity Formula can also be used to help minimize sensitivity.

Note: Allow a period of 7–10 days after whitening treatment before bonding. The high concentration of oxygen in the tooth could have a significant adverse effect on polymerization of resins.
Opalescence® Tooth Whitening Reference Guide

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Active Ingredient</th>
<th>Contains</th>
<th>Indications For Use</th>
<th>Flavors</th>
<th>Wear Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opalescence® PF 10%</td>
<td>10% Carbamide Peroxide</td>
<td>Potassium Nitrate, Fluoride and Xylitol</td>
<td>TAKE-HOME; Patients with concern of sensitivity; can be worn day or night</td>
<td>10% Mint 10% Regular</td>
<td>8–10 hours a day</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Opalescence® PF 16%</td>
<td>16% Carbamide Peroxide</td>
<td>Potassium Nitrate, Fluoride and Xylitol</td>
<td>TAKE-HOME; Faster whitening; recommended to wear during the day</td>
<td>16% Mint 16% Regular</td>
<td>4–6 hours a day</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Opalescence® PF 20%</td>
<td>20% Carbamide Peroxide</td>
<td>Potassium Nitrate, Fluoride and Xylitol</td>
<td>TAKE-HOME; Faster whitening; recommended to wear during the day</td>
<td>20% Mint 20% Regular</td>
<td>2–4 hours a day</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>Opalescence® PF 35%</td>
<td>35% Carbamide Peroxide</td>
<td>Potassium Nitrate, Fluoride and Xylitol</td>
<td>TAKE-HOME; Shorter wear time and touch-ups</td>
<td>35% Mint 35% Regular</td>
<td>30–60 minutes a day</td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td>Opalescence® Go 6%</td>
<td>6% hydrogen peroxide</td>
<td>Potassium Nitrate, Fluoride and Xylitol</td>
<td>TAKE-HOME; Ready-to-go; an alternative to OTC products</td>
<td>6% Mint</td>
<td>60–90 minutes a day</td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Opalescence® Go 10%</td>
<td>10% hydrogen peroxide</td>
<td>Potassium Nitrate, Fluoride and Xylitol</td>
<td>TAKE-HOME; Ready-to-go; an alternative to OTC products</td>
<td>10% Melon</td>
<td>30–60 minutes a day</td>
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<tr>
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<tr>
<td>Opalescence® Go 15%</td>
<td>15% hydrogen peroxide</td>
<td>Potassium Nitrate, Fluoride and Xylitol</td>
<td>TAKE-HOME; Ready-to-go; an alternative to OTC products</td>
<td>15% Mint</td>
<td>15–20 minutes a day</td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Opalescence® Endo</td>
<td>35% hydrogen peroxide</td>
<td>–</td>
<td>DENTIST-ADMINISTERED for internal whitening of endodontically treated teeth</td>
<td>–</td>
<td>3–5 days per application</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opalescence® Boost 40%</td>
<td>40% hydrogen peroxide</td>
<td>Potassium Nitrate and Fluoride</td>
<td>DENTIST-ADMINISTERED; Fast chairside treatment</td>
<td>–</td>
<td>2–3, 20-minute applications; DO NOT exceed 3 applications per visit</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>Opalustre® Microabrasion Slurry</td>
<td>6.6% hydrochloric acid silicone carbide</td>
<td>–</td>
<td>DENTIST-ADMINISTERED; Chairside treatment removes superficial white/brown stains</td>
<td>–</td>
<td>Office visit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UltraEZ® Desensitizing Gel</td>
<td>3% potassium nitrate and 0.25% neutral NaF</td>
<td>–</td>
<td>TAKE-HOME; Sensitivity treatment</td>
<td>–</td>
<td>15–60 minutes a day</td>
</tr>
</tbody>
</table>

Opalescence tooth whitening gel contains PF (potassium nitrate and fluoride).

In an in vitro study researchers looked at whether treatment with tooth whitening products with different concentrations of carbamide peroxide or hydrogen peroxide would increase the susceptibility for caries. Even a tooth whitening product with a neutral pH and 10% carbamide peroxide did not lead to a higher caries risk.
Opalescence® Carbamide Peroxide vs. Hydrogen Peroxide Concentrations

About one-third of the carbamide peroxide (CP) contained in whitening agents separates into hydrogen peroxide (H2O2), the active whitening agent. This is important to know in order to correctly assess the intensity of whitening products.
PF 10%, 16%, 20% and 35%
CARBAMIDE PEROXIDE WITH POTASSIUM NITRATE AND FLUORIDE

- Opalescence PF tooth whitening gels contain PF (potassium nitrate and fluoride)
- Formulated to prevent dehydration and shade relapse
- Four concentrations for treatment flexibility
- Available in Mint, and, Regular flavours
- Sticky, viscous gel won’t migrate to soft tissues and ensures tray stays securely in place
- Day or night wear

The sticky, viscous formula of Opalescence gel does not leach from the tray like other whitening agents, and the sticky gel holds the comfortable tray securely in place. Opalescence gel contains PF (potassium nitrate and fluoride). Twenty percent water content prevents dehydration and shade relapse, making Opalescence gel one of the most reliable whitening gels available.

A university study proves that the gel stays active for 8–10 hours during overnight whitening, which means patients experience results quickly, increasing compliance. Opalescence gel is available in a variety of concentrations, formulations, flavors, and kit configurations to meet all your patients’ whitening needs.

Opalescence gel is recommended for whitening discolored teeth prior to placement of composite, veneers, and/or crowns. It is effective in breaking down some or all internal tooth discolorations due to congenital, systemic, pharmacologic, traumatic, etc., factors as well as aging. It is successful with fluorosis and even tetracycline staining.
**TRAY FABRICATION INSTRUCTIONS**

1. Pour impression with fast-set plaster or dental stone. Pour alginate shortly after making impression to ensure accuracy. Trimming is less work if quantity of stone is kept to a minimum. Palate and tongue areas are not poured or should be removed after plaster has set. Allow model to dry two hours.

2. For reservoir spaces, apply Ultradent® LC Block-Out Resin approximately 0.5 mm thick onto labial surfaces and approximately 1.5 mm shy of the gingival margin. DO NOT extend onto incisal edges or occlusal surfaces. Using VALO® curing light, cure each tooth 5 seconds. Wipe off oxygen inhibition layer.

3. With vacuum former, heat tray material (Soft-Tray® Classic Sheets) until it sags approximately 1 inch. Adapt plastic over model. Cool and remove model from vacuum former.

4. With tactile scissors (Ultra-Trim Scalloping Scissors), carefully and precisely trim tray to true line which is at gingival height. Scallop edges to avoid contact with gingival tissue.

5. Return tray to model; check tray extensions. Gently flame polish the edges one quadrant at a time, if necessary, with a butane torch. While still warm, immediately hold periphery of each segment firmly against model for three seconds with water-moistened gloved finger. If this over-thins the tray material, fabricate a new tray.

6. With vacuum former, heat tray material (Sof-Tray® Classic Sheets) until it sags approximately 1 inch. Adapt plastic over model. Cool and remove model from vacuum former.

7. Place tray over teeth. Gently press tray to move gel into place. Pressing too firmly will force gel out of tray.

8. Clean tray with soft toothbrush and cool water. Store tray in appliance case when not in use.

9. Gently wipe off excess gel with a soft toothbrush.

10. Clean tray with soft toothbrush and cool water. Store tray in appliance case when not in use.

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**STAYS ACTIVE THROUGH THE NIGHT!**

Indiana University: Small quantities of gel were removed and analyzed at various intervals. There is no other product on the market that can deliver the extremity and stability of results that we have experienced using Opalescence PF. It is a well-tuned whitening product that contains a desensitizing agent as well as fluoride, to maximize comfort and physical benefits whilst achieving what we refer to as Sustainable Whiteness.

—DR. CLARENCE TAM – AUCKLAND, NEW ZEALAND

“I recommend Opalescence PF gel to other doctors because the results from patients using it are consistent. The sticky, viscous Opalescence PF gel is one of the most effective solutions I’ve used. My patients feel better knowing that the application of the gel also provides beneficial results such as improving enamel health and increasing enamel microhardness.”

—DR. FRANK SPEAR – SEATTLE INSTITUTE FOR ADVANCED DENTAL EDUCATION

“On behalf of my staff as well as my patients, not one person has made a comment in regards to sensitivity while using this product.”

—DR. HEDY ATASHBAR – SILVER SPRING, MD

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### Opalescence Doctor Kits

<table>
<thead>
<tr>
<th>Flavor</th>
<th>10% PF</th>
<th>16% PF</th>
<th>20% PF</th>
<th>35% PF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mint</td>
<td>5379-AU</td>
<td>4483-AU</td>
<td>5385-AU</td>
<td>5388-AU</td>
</tr>
<tr>
<td>Regular</td>
<td>5381-AU</td>
<td>4485-AU</td>
<td>5387-AU</td>
<td>5390-AU</td>
</tr>
</tbody>
</table>

8 x 1.2 ml Opalescence syringes  
1 x 1.2 ml Ultradent LC Block-Out Resin syringe  
2 x Sof-Tray 0.035” 5” x 5” sheets  
1 x Black Mini tip  
1 x Tray case  
1 x Shade guide

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### Opalescence Syringe 40pk

<table>
<thead>
<tr>
<th>Flavor</th>
<th>10% PF</th>
<th>16% PF</th>
<th>20% PF</th>
<th>35% PF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mint</td>
<td>5394-AU</td>
<td>4486-AU</td>
<td>5400-AU</td>
<td>5403-AU</td>
</tr>
<tr>
<td>Regular</td>
<td>5396-AU</td>
<td>4488-AU</td>
<td>5402-AU</td>
<td>5405-AU</td>
</tr>
</tbody>
</table>

1.2 ml syringes

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### Opalescence® Giftbags

- **FROSTED PLASTIC**
- **SMALL ORGANZA**
- **LARGE ORGANZA**

Note: Gift bags only. Product not included.

<table>
<thead>
<tr>
<th>Description</th>
<th>Sku</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frosted Plastic 10pk</td>
<td>8752</td>
</tr>
<tr>
<td>Small Organza 10pk</td>
<td>8751</td>
</tr>
<tr>
<td>Large Organza 10pk</td>
<td>8750</td>
</tr>
</tbody>
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### Opalescence® Pocket Tray Cases

<table>
<thead>
<tr>
<th>Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Shade Guide Card 50pk</td>
<td>498</td>
</tr>
<tr>
<td>Pocket Tray Cases Variety 20 pk</td>
<td>707</td>
</tr>
</tbody>
</table>
Opalescence go

6%, 10% and 15%
PRE FILLED WHITENING TRAYS - HYDROGEN PEROXIDE

• Unique UltraFit™ tray material offers a remarkably comfortable fit and easily conforms to any patient’s smile
• Molar-to-molar coverage ensures the gel comes in contact with more posterior teeth
• Convenient prefilled trays can be worn right out of the package
• Optimal gel quantity allows easy cleanup after whitening
• 6% - wear 60–90 minutes for 5–10 days;
• 10% - wear 30–60 minutes for 5–10 days;
• 15% - wear 15–20 minutes for 5–10 days
• Opalescence Go tooth whitening gel contains PF (potassium nitrate and fluoride)
• Delicious Mint and Melon flavors

Opalescence Go take-home whitening system is recommended for patients looking for professional whitening to go or as an alternative to over-the-counter whitening products. With no impressions, models, or lab time required, Opalescence Go trays are also a perfect follow-up to in-office whitening.

PATIENT INSTRUCTIONS

1. Remove from package.
2. Center tray on arch.
3. Gently suck down or swallow.
4. Remove outer tray.
5. Suck down or swallow again.
6. Wear 6% for 60-90 minutes, 10% for 30–60 minutes and 15% for 15–20 minutes.

Opalescence Go Patient Kits

<table>
<thead>
<tr>
<th>Flavor</th>
<th>6%</th>
<th>10%</th>
<th>15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mint</td>
<td>4639-AU</td>
<td>—</td>
<td>4638-AU</td>
</tr>
<tr>
<td>Melon</td>
<td>—</td>
<td>4636-AU</td>
<td>—</td>
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</tbody>
</table>

Opalescence Go Sample Dispenser Kit/Refill

<table>
<thead>
<tr>
<th>Flavor</th>
<th>Kit 20pk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melon 10%</td>
<td>4652-AU</td>
</tr>
</tbody>
</table>

BEFORE AND AFTER

Patient, results with Opalescence Go® 10% whitening after ten trays

Patient, results with Opalescence Go® 15% whitening after ten trays

Flavor Kit 20pk

10 x Each upper/lower trays

20 x Each upper/lower trays

25 x Patient instructions
Ultradent® LC Block-Out Resin

• Optimal viscosity for proper application
• Blue pigment for visibility during application
• Great utility resin with multiple uses

Ultradent LC Block-Out Resin provides reservoir space for whitening trays and is useful for other laboratory procedures such as model and die repairs. Ultradent LC Block-Out Resin can be rapidly and efficiently delivered with the Black Mini tip. It must be light cured and is not intended for intraoral use.

For reservoir spaces, apply Ultradent LC Block-Out Resin approximately 0.5 mm thick onto the labial surfaces, staying about 1.5 mm from gingival line, and light cure. Do not extend onto incisal edges and occlusal surfaces.

"Ultradent LC Block-Out Resin is the original resin block-out product for extraoral use and it's still the best."
—REALITY RATINGS

UltraEZ gel is a sustained-release 3% potassium nitrate desensitizing gel with fluoride (0.25% neutral NaF). This sustained-release formula quickly eliminates sensitivity from toothbrush abrasion, thermal and chemical changes, tooth whitening, and root exposure.

1. realityesthetics.com

UltraEZ® DESENSITIZING GEL WITH POTASSIUM NITRATE AND FLUORIDE

Featuring the UltraFit™ tray

• Provides immediate results
• Eliminates sensitivity
• Non-flavored gel available in syringes or disposable trays
Did you know?

The new packaging for Ultradent’s Opalescence PF Whitening now uses 70% less plastic!

This redesign was made with both you (the Dental Professional), and the environment in mind.

Ultradent has a commitment to improving oral health globally in the most sustainable way possible, and this commitment is unwaivering.

Sof-Tray® Classic Sheets

Select the 0.035” for most whitening trays, and the 0.060” or the 0.080” for whitening patients who are bruxers.

With vacuum former, heat Sof-Tray® Classic Sheet until it sags approximately 1 inch. Adapt plastic over model. Cool and remove model from vacuum former.

Ultradent® Ultra-Trim Scalloping Scissors

- Use for precise trimming of border around interdental papilla
- Spring loaded to minimize finger fatigue
- Grips tray material easily
- Made of durable stainless steel

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>226</td>
<td>Sof-Tray Regular Sheets 0.035” 5” x 5” 25pk</td>
<td>0.35” THICKNESS</td>
</tr>
<tr>
<td>227</td>
<td>Sof-Tray Medium Sheets 0.060” 5” x 5” 20pk</td>
<td>0.060” THICKNESS</td>
</tr>
<tr>
<td>284</td>
<td>Sof-Tray Heavy Sheets 0.080” 5” x 5” 20pk</td>
<td>0.080” THICKNESS</td>
</tr>
<tr>
<td>605</td>
<td>Ultradent Ultra-Trim Scalloping Scissors 1pk</td>
<td></td>
</tr>
</tbody>
</table>
OpalDam® and OpalDam® Green
LIGHT-CURED RESIN BARRIERS

OpalDam light-cured resin barrier is a passively adhesive (sealing) methacrylate-based resin barrier used for isolating tissue adjacent to teeth being whitened. For single-tooth whitening, it may be used to protect adjacent teeth. OpalDam resin barrier is light reflecting to minimize heat and tissue sensitivity during curing. OpalDam Green resin barrier ensures a safe, unmistakable barrier every time.

INSTRUCTIONS

1. Apply OpalDam resin barrier 4–6 mm wide on gingiva. Seal interproximal spaces. Overlap resin approximately 0.5 mm onto dry enamel to seal. Extend resin one tooth beyond last tooth whitened. Light cure using a scanning motion for 20 seconds.

2. Remove cured resin quickly and easily in one piece or a few large pieces. Check interproximally for retained resin. Designed to remove easily from embrasures and undercuts.

SEE THE COLOR

OpalDam Green resin barrier offers effective coverage of oral tissues, making in-office whitening easier than ever before.
Opalescence® BOOST
IN-OFFICE POWER WHITENER - 40% HYDROGEN PEROXIDE

• NO LIGHT NEEDED!
• Powerful 40% hydrogen peroxide gel
• Two to three 20-minute applications for a total of 40–60 minutes of treatment time, not exceeding 3 applications in one visit
• Precise delivery
• Easy to see for complete removal
• Chairside syringe-to-syringe mixing ensures maximum strength
• Opalescence Boost tooth whitening gel contains PF (potassium nitrate and fluoride)

Opalescence Boost in-office whitener is chemically activated, so it does not require a light for whitening. Syringe-to-syringe mixing activates the product just prior to application. The activated 40% hydrogen peroxide is conveniently delivered via syringe and applied to teeth for whitening.

While there are many other factors to consider, the beginning shade sets the foundation for proper expectations after treatment. This is especially true with in-office whitening. Opalescence® Boost® whitening is an excellent in-office treatment for less severe, more mild staining as well as tetracycline staining. Patients should see immediate results and, in most cases, their teeth will continue to whiten 24–48 hours after the treatment.

INSTRUCTIONS

IMPORTANT NOTE: After mixing, Opalescence® Boost™ gel is good for 10 days refrigerated. Before disposing of syringes aspirate water into the syringe and express liquid down the drain. Repeat a couple of times before disposing of the syringe. Make sure any gauzes used are rinsed with water.

WARNING: Clinician, assistant, and patient must wear protective eyewear with side shields when mixing and applying Opalescence Boost in-office whitening.

1. Check to see that the syringes are securely attached. Depress the small clear plunger (A) into the middle small clear syringe (B) to rupture the internal membrane and combine whitening agent and activator.

2. Press the plunger of the red syringe (C) in, pushing all contents into the clear syringe (B).

3. Press the clear plunger completely back into the red syringe (C). To thoroughly mix activator with whitening gel, push stems back and forth continually with thumbs and mix a minimum of 50 times rapidly (25 times each side).

4. Press all mixed gel into the RED syringe. Separate the two syringes and attach the Micro 20 ga FX® tip onto the red syringe. Check the flow on a cotton gauze or mixing pad prior to applying it intraorally. If resistance is met, replace the tip and recheck the flow.

5. Place Ultradent IsoBlock™ bite block and self-supporting plastic cheek retractors. Completely rinse and air dry teeth and gingiva.

6. Securely attach a Micro 20 ga tip to an OpalDam® resin barrier syringe and check flow. Express a continuous bead along the gingival margin, overlapping approximately 0.5 mm onto the enamel. Begin and finish the bead one tooth beyond the most distal tooth that is being whitened, building the barrier 4–6 mm wide and 1.5–2.0 mm thick. Express the resin through any open embrasures.
7. Light cure the OpalDam resin barrier for 20 seconds per arch using a scanning motion. Check the resin cure with an instrument using caution not to disrupt the seal.

8. Apply a 0.5–1.0 mm thick layer of the gel to the labial surface of the tooth. Allow the gel to remain on the teeth for 20 minutes per application.

9. Suction gel from teeth using the Ultradent® Luer Vacuum Adapter and SST™ tip or a surgical suction tip. Do not use water. Repeat steps 8–9. Stop when desired results are achieved, or if the three applications per visit maximum have been met.

10. After the final application is complete and all visible gel is removed, thoroughly rinse the teeth with an air/water spray and high volume suction.

11. Gently slide the tip of a dental instrument beneath the OpalDam resin barrier and lift it off. Check for and remove any interproximal remnants.

11. Evaluate the shade change. If additional whitening is desired and no sensitivity is noted, reschedule patient in 3–5 days for repeat treatment or dispense take-home whitening treatment.

1. realityesthetics.com.

**BEFORE AND AFTER**

Before Opalescence Boost in-office whitener.

After two 20 minute applications of Opalescence Boost whitening treatments.

Before Opalescence Boost in-office whitener.

After three 20 minute applications of Opalescence Boost whitening treatments.

“Our practice uses this in-chair whitening product is a no-gimmick professional whitening tool that works to deliver maximum whitening power for teeth that need an extra nudge. In our hands, the Ultimate Boost is achieved if used via the combination whitening approach in conjunction with the custom nightguard bleaching technique.”

—DR. CLARENCE TAM – AUCKLAND, NEW ZEALAND

“I have used many different professional teeth whitening products and I still find that the benchmark is Opalescence Boost. In my practice we use it in combination with Opalescence 10% solution in custom home whitening trays to provide our patients with an unparalleled result.”

—DR. AODHAN DOCHERTY – SYDNEY, AUSTRALIA

**IsoBlock™**

**BITE BLOCK**

- Eases TMJ strain
- Designed to be comfortable for patient
- Provides bilateral support with tongue restraint

These disposable IsoBlock bite blocks relax the lips and cheeks, allowing full access to facial and buccal surfaces for in-office whitening, Class V restorations, veneers, cementation, etc.

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<tr>
<th>Item Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>4750-AU</td>
<td>Opalescence Boost 40% Intro Kit</td>
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<tr>
<td>4751-AU</td>
<td>Opalescence Boost 40% Patient Kit</td>
</tr>
<tr>
<td>4754-AU</td>
<td>Opalescence Boost 40% Syringe 20pk</td>
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1. realityesthetics.com.
Opalescence® Endo
NON-VITAL ‘WALKING BLEACH’ - 35% HYDROGEN PEROXIDE

• 35% hydrogen peroxide
• Easy to place inside pulp chamber
• 3–5 day treatment

Opalescence Endo non-vital whitening gel is formulated specifically to whiten endodontically treated discolored teeth using the “walking bleach” technique.

BEFORE AND AFTER

PROCEDURE

1. A glass ionomer is placed on the floor of the pulp chamber to seal the obturation from penetration of the hydrogen peroxide.

2. Apply a layer of Opalescence Endo gel to the chamber.

3. Insert a cotton pellet inside the chamber.

4. Deliver mixed UltraTemp® Regular filling material directly to site.

5. Easily wipe away excess with a wet cotton ball or gauze before it sets.

Finished. Repeat every 3–5 days until desired results are achieved.

Note: Not intended for use in traumatized teeth, any sign of cervical resorption, or after multiple whitening attempts.

MUST BE REFRIGERATED

1323-AU  Opalescence Endo Syringe 2pk
1.2 ml syringes

ultradent.com/au
Opalustre®
CHEMICAL AND MECHANICAL ABRASION SLURRY

- Permanently removes superficial white and brown stains
- Provides minimally invasive, permanent treatment for fluorosis
- Low 6.6% hydrochloric acid concentration aids in chemical stain removal
- Silicon carbide microparticles provide gentle mechanical abrasion
- Features optimum viscosity for precise abrasion and control of the slurry
- Autoclavable OpalCups minimize splatter

Opalustre 6.6% hydrochloric acid slurry contains silicon carbide microparticles. This combination provides chemical stain removal along with gentle mechanical abrasion. OpalCups are latch-type bristle polishing cups that are used with the Opalustre slurry microabrasion technique to facilitate a more aggressive action and minimize splatter. OpalCups finishing cups are used with Opalustre slurry for micropolishing the newly treated enamel surface. Both types of OpalCups are autoclavable through a limited number of cycles.

Use Opalustre slurry and OpalCups to quickly remove unsightly enamel decalcification defects that are less than 0.2 mm in depth. Abrasion slurries are ideal for superficial white and brown demineralization due to enamel mottling from fluorosis. This treatment can be classified under ADA insurance code 9970: enamel microabrasion.

INSTRUCTIONS - RUBBER DAM
1. Before.
2. After rubber dam placement, apply Opalustre slurry to discolored enamel using the syringe.
3. Use bristle cup to compress Opalustre slurry on tooth surface. Intermittent rinsing and inspection is recommended.
4. After enamel microabrasion and 21 days of using Opalescence® whitening gel.

INSTRUCTIONS - OPALDAM
1. Isolate mottled teeth with OpalDam resin barrier. Apply Opalustre slurry directly out of the syringe with a Black Mini® tip.
2. Press the cup against the surface at a slow speed.
3. Remove Opalustre slurry with an air/water spray. Please pay attention to careful vacuuming. Check to see if repeating the treatment is appropriate.
Remove or significantly reduce mild to moderate decalcification related to orthodontic treatment with a few applications of Opalustre® slurry. Apply with stiff bristle cups and 10:1 gear reduction handpiece with firm pressure.

Enamel decalcification corrected after one application of Opalustre® slurry using OpalCups bristles and 10:1 gear reduction handpiece with firm pressure.

Remove or significantly reduce mild to moderate decalcification with a few applications of Opalustre® slurry.

Opalustre Kit
4 x 1.2 ml Opalustre syringes
10 x Each OpalCups bristle and finishing
20 x White Mac tips

Opalustre Syringe 4pk
1.2 ml syringes

OpalCups Bristle 20pk

OpalCups Finishing 20pk
CASE STUDY

Enamel Microabrasion: Improvement of Anterior Aesthetics in a Paediatric Patient

ABOUT THE DENTIST

Dr. Bharat Agrawal completed a Bachelor of Oral Health in Dental Science and Graduate Diploma of Dentistry at Griffith University, Gold Coast, graduating with multiple final year awards. His passion for aesthetic and restorative dentistry led him to complete a Masters in Aesthetic Dentistry with Distinction (MSc AesDent) through King’s College in London. His final year dissertation looked at the effectiveness and longevity of take-home dentist prescribed tray bleaching techniques combined with a clinical audit.

Dr. Agrawal has presented on tooth whitening, digital workflows, the alignment-restorative interface, composite resins and the provision of Invisalign with a key focus on minimally invasive aesthetic Dentistry throughout Australia and in the UK.
BACKGROUND

It is irrefutable that there has been a significant increase in interest from both patients and clinicians alike in aesthetic dentistry. Coupled with a paradigm shift towards treatment modalities that are minimally invasive and respectful to biological tissues, it is of paramount importance that clinicians be aware of the numerous treatment options available to them in treating such patients. Tooth discoloration is an unfortunate and significantly prevalent condition with patients commonly seeking improvement in the perceived aesthetics that comes from improved shade and overall uniformity in colour (1). Tooth dyschromia has been referenced as the most rapidly perceived dental aesthetic abnormality (2). Fortunately, most cases of discoloration can be managed predictably with various methods of dentist prescribed whitening.

Often more complex, intrinsic enamel discolorations (either congenital or acquired) pose greater challenges, especially when present in younger patients. These may be present due to developmental aetiology or due to post-developmental factors, commonly presenting as yellow, brown or white lesions that affect single teeth or the whole dentition (3). This may be due to simple extrinsic staining or due to either hypo- or hypermineralised enamel, with the discoloration often residing within the superficial enamel layers. There may be a distinct event during amelogenesis that may lead to this, such as the excessive ingestion of a fluoridated dentifrice, or when no history of such exists they may be classified as idiopathic in origin (4). Where significant localised discoloration has been present, restorative measures have traditionally been recommended, ranging from simple composite resin bonding or more aggressive interventions such as porcelain veneers. Often, such complex treatments have been deferred in young individuals either due to patient compliance or to uphold the notion of nonmaleficence and minimally invasive dentistry. It is important, however, that the sensitive needs of young patients are not ignored, with dental aesthetic abnormalities often associated with low self-esteem (5). Techniques for stain removal using acidic formulations have been documented as early as 1916. These techniques have developed significantly over the course of the last century, improving aesthetic appearance by removing discolorations within the superficial enamel layer (25 to 200μm) (4). Termed ‘microabrasion,’ multiple variations in technique have been reported, with contemporary approaches combining an acid with an abrasive particle. Examples include the combination of hydrochloric acid and pumice, phosphoric acid and pumice or the combination of hydrochloric acid and silica carbide particles (4).

For microabrasion techniques to be successful, it is important that the discoloration is present within the superficial layer of enamel. It is often difficult to diagnose the depth of such lesions and it is important that patients are aware that when a lesion extends deeper within enamel or indeed into dentine, restorative or whitening measures may need to be employed to complement such treatments. When a lesion is confined to dentine, such as that seen in tetracycline stained teeth, it is essential that alternative treatment modalities be implemented (3).

Proprietary formulations, such as Opalustre (Ultradent Products, USA) have made it easier and safer to utilise this technique in vivo, minimising risks to patient hard and soft tissues. The strong contrast to tooth tissue provided by the intense purple colouration also allows for more definite and precise application within the peripheries of the lesion, preserving unaffected tissue.
The following case depicts the use of enamel microabrasion utilising Opalustre (Ultradent Products, USA) in the treatment of a seven-year-old male patient, reporting significant dissatisfaction associated with anterior discolouration. His parents relayed that the patient was experiencing strong feelings of poor self-esteem triggered primarily by school-yard bullying. Up until now, the family was advised that they would need to wait till the patient was much older with treatment recommendations ranging from tooth whitening to porcelain veneers, thus no prior treatment had been undertaken.

The patient presented with brown chromatic lesions on the upper left and right central incisors, thought to be confined with the superficial enamel and localised to the middle and incisal thirds of the coronal tooth. The patient was in mixed dentition stage of development, it was noted that no other teeth were compromised, including the first permanent molars.

An acceptable aesthetic result was achieved with no aggressive preparation of the existing tooth surface and both the parents and the patient were happy with the final aesthetics. It is interesting to note that the abraded area appears slightly more chromatic, due most likely to the slightly thinner enamel in this area allowing greater show through of the underlying dentine. If this is of concern to the patient when they are older, the aforementioned treatment may be supplemented with vital bleaching procedures, such as in-tray whitening.

PROCEDURE

After a discussion of alternative treatments and potential outcomes, the minimally invasive nature of the treatment and the potential need for adjunct restorative, resin infiltration or whitening treatments in the future, the patient and parents consented to commencing with microabrasion. Baseline photographic records were taken, followed by the application of rubber dam to isolate the field and protect adjacent soft tissue. It was essential to ensure it was well inverted in the area of interest but if this was not possible, as is often the case in the mixed dentition, this may have required supplementing with a light-cured resin barrier.

A layer of Opalustre was then applied directly to the lesion, limiting it to the area of discolouration. A rubber prophylaxis cup was utilised at slow speed, with medium pressure for 60 seconds prior to being rinsed off. This was repeated a total of three times.

At this point the procedure was deemed an aesthetic success, with both the patient and parents suitably satisfied with the outcome. Tooth Mousse (CPPACP) was applied for four minutes prior to dismissing the patient.

The patient was reviewed at two weeks, which allowed sufficient time for the teeth to rehydrate and assess the final aesthetic outcome. This was important to ensure no further abrasion was necessary or the need for any adjunct treatments.

An acceptable aesthetic result was achieved with no aggressive preparation of the existing tooth surface and both the parents and the patient were happy with the final aesthetics. It is interesting to note that the abraded area appears slightly more chromatic, due most likely to the slightly thinner enamel in this area allowing greater show through of the underlying dentine. If this is of concern to the patient when they are older, the aforementioned treatment may be supplemented with vital bleaching procedures, such as in-tray whitening.
RESULT

An acceptable aesthetic result was achieved with no aggressive preparation of the existing tooth surface and both the parents and the patient were happy with the final aesthetics. It is interesting to note that the abraded area appears slightly more chromatic, due most likely to the slightly thinner enamel in this area allowing greater show through of the underlying dentine. If this is of concern to the patient when they are older, the aforementioned treatment may be supplemented with vital bleaching procedures, such as in-tray whitening.

This case exemplifies the impact we can have on our patients’ lives with simple, non-invasive aesthetic techniques through appropriate diagnosis and using Opalustre for microabrasion. This should be offered to patients as a first line treatment even if it requires supplementing with additional techniques due to its minimally invasive nature and potential for significant aesthetic improvement without the need for anaesthetic or significant irreversible tooth preparation.

PRODUCTS USED

Opalustre® Chemical and Mechanical Abrasion Slurry

References

Get your patients excited with marketing materials designed specifically for your practice.
Ask us about Opalescence Go whitening. Her smile in about an hour. A bright smile helps her make friends on her travels.

Ask us about Opalescence PF whitening. A brighter smile gives her a convenient way she can whiten on her own schedule. A brighter smile gives her.

Ask us about Opalescence Boost whitening. A bright new white smile is waiting to fit your lifestyle.

Ask us about Opalescence PF whitening. That's the power of a smile. A bright smile gives him the confidence to take on any challenge. That's the power of a smile.

Ask us about Opalescence Go whitening.

Juan from Sweden, loves surfing, fishing, snowboarding, and hiking. He smiles most when he is in the outdoors with friends.

Fernando from the Bahamas—an addiction counselor, athlete, and father—smiles when she is able to travel and experience new cultures.

Calle from the United States—a dancer, swimmer, and student—smiles most when she is on the field. Opalescence Go prefilled whitening trays are an easy way for him to keep his smile bright in a way that fits his lifestyle.

Gino, from Poland—a general manager of a medical spa and owner—smiles because she loves to be herself.

From Brazil—a marketing analyst—smiles most when she is able to travel and experience new cultures.

Andrea—a footballer and tennis player—smiles when he is on the move. That's the power of a smile.

That's the power of a smile. A bright smile gives him the confidence to take on any challenge. That's the power of a smile.
Opalescence® Ceiling Posters 1pk
24” x 24”
Place these on the ceiling above your dental chairs. Patients will see them and ask for more information about whitening treatments.

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Opalescence® Statement Stuffers 50pk

Opalescence® Office Flyers 50pk
Customize it! Visit ultradent.com to personalize these products using our printing template.

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Opalescence® Appointment Cards 50pk
Printed on a perforated 8 1/2” x 11” sheet with a blank back so you can print a message and your address using an inkjet or laser printer.

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Ask us today!
MARKETING MATERIALS

Opalescence® Displays 1pk

80028
68218

Opalescence® Display Inserts 1pk

1008276 - PF
1008277 - PF
1008278 - PF

Opalescence® Whitening Menu 50pk

Educate patients on the many whitening options available in your office and set your offerings apart from the many over-the-counter whiteners available.

68396

Opalescence® Custom Tray Patient Instructions 50pk

Use to quickly and easily explain the take-home whitening process and procedure to your patients.

80040
Opalescence® Small Window Cling 1pk 3” x 6”

Place these in your windows or mirrors so patients will see them and ask for more information about whitening treatments.

Opalescence® Large Window Clings 1pk 7” x 18 1/2”

Opalescence® Mirror Cling 1pk 5 1/2” x 7”

Opalescence® Gift Certificate 1pk

Opalescence® Gift Bags  Note: Gift bags only. Product not included.

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In 1976, after graduating from Loma Linda University and beginning his own practice, Dr. Dan Fischer invented his groundbreaking Astringedent® hemostatic solution in response to the need for a tissue management product that achieved more rapid, profound hemostasis. The success of Astringedent hemostatic fueled Dr. Fischer’s desire to continue developing innovative and more advanced dental solutions—leading to the founding of Ultradent Products, Inc.

Now, marking its 44th year as a family-owned, international dental supply and manufacturing company, Ultradent has continued its vision to improve oral health globally by creating better dental products that continue to set new industry standards. Dr. Fischer has numerous patents to his name and regularly lectures and writes articles about state-of-the-art dentistry. He also works part-time in his daughter’s dental practice, which enables him to connect with patients and practice minimally invasive dentistry—a philosophy around which Ultradent develops its products and procedures.

Ultradent currently researches, designs, manufactures, and distributes more than 500 materials, devices, and instruments used by dentists around the world. This includes its renowned, industry-leading Opalescence® Tooth Whitening System, and the groundbreaking Opalescence Go™ professional take-home whitening system. Ultradent’s product family also includes the award-winning VALO® LED curing light, UltraSeal XT® hydro pit and fissure sealant, and Ultra-Etch® etchant. Recent new innovations include the Uveneer® composite veneer template system, which creates natural-looking, high-quality direct composite veneers quickly and easily.

Ultradent has been the recipient of Small Business Administration’s Exporter of the Year and Direct Distributor of the Year awards. Most recently, Ultradent was the recipient of the Health Care Heroes award in the category of Corporate Achievement. Ultradent and Dr. Fischer have been recognized for outstanding industry leadership and for making defining contributions to the dental community. In 2013, the Utah Governor’s Office of Economic Development named Dr. Fischer “International Man of the Year” for his contributions to sustaining economic and cultural relations between the state of Utah and the European Union.

In choosing to create the award, Dr. Amir H. Motamed, DDS, says “With the ever-increasing prominence of the Internet in the Information Age, it has become increasingly more challenging for dentists to delineate fact from fiction and pertinent research results from creative marketing strategies. The Golden Hands Award of Xcellence has been created to represent and promote the values that the dental profession holds in its highest regard.

Ultradent is honored and humbled to have received such a distinction. It is our greatest hope to continue on with a legacy of truth and ethics in advertising—and all else that we do—in the years to come.

Ultradent is proud to be a two-year winner of the Golden Hands Award of Xcellence for Ethics and Truth in Advertising.
THE ART OF TEMPORARY

Designed to mimic the esthetics and function of natural dentition, ExperTemp is a bis-acryl composite provisional material used to fabricate temporary crowns, bridges, inlays and onlays, as well as long-term temporaries, and will keep your patients’ smiles beautiful every step of the way.

- Easy to trim and polishes beautifully
- Available in multiple shades: A1, A2, A3, A3.5, B1, and Bleach White
- Low oxygen inhibition at polymerization
- Can be repaired with a packable composite, a flowable composite, or additional ExperTemp material
- High abrasion resistance and flexibility
- Introral set time of approximately 40–100 seconds
- Fluorescence similar to enamel

ExperTemp™
Temporary Crown & Bridge Material

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Since 1979 Ultradent Products, Inc., has been manufacturing the highest-quality dental products and equipment at our facility in the United States. Your support keeps Americans at work and helps improve the health and livelihood of citizens all over the country.