

# THE DENTAL ADVISOR<sup>TM</sup>

Improving Patient Care Through Research & Education

2012 CLINICAL PROBLEM

 **SOLVERS**

Dentists and their staff face daily challenges with materials and equipment when treating patients. Most teams have identified “go to” products that are helpful. These products can solve a clinical problem and save time, headaches, and costs.

This issue of THE DENTAL ADVISOR reports on products recommended by the editorial team of THE DENTAL ADVISOR. Each product has been identified as an excellent choice for solving a particular clinical challenge.

**July/Aug 2012**

Vol. 29, No. 6

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[www.dentaladvisor.com](http://www.dentaladvisor.com)

## RATINGS:

Excellent + + + + +  
Very Good + + + +  
Good + + +

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## From the Desk of *Dr. Bunek, Editor-in-Chief*



As one of the evaluators for THE DENTAL ADVISOR, I get to work with most products out on the market. So, it is not surprising that one of the most common questions asked from our readers is “what product do you use?” Many of the members of our editorial board who are out lecturing are asked the same question. We realize that dentists and their teams face daily challenges with materials and equipment when treating patients, and that it can be difficult to keep up with the vast array of materials on the market.

For this issue, we have selected products that we have found to be excellent for solving a particular clinical challenge. As practicing clinicians, we do not always agree on what works best. However, each of us always knows why it works for us, and this issue illustrates those specifics.

The “Clinical Problem Solver” is a special editorial designation we give to those products that we reach for in the toughest clinical situations. The issue includes comments from our editorial board about why the product works for them, and the specifics surrounding the clinical problem. I hope you’ll find this information useful and please feel free to email us some of your “go-to” product suggestions for next year. Enjoy!

## 2012 CLINICAL PROBLEM SOLVERS

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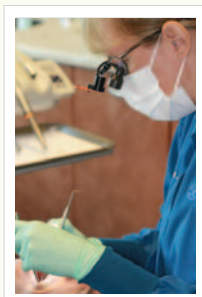
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## Feather Light LED (Ultralight Optics Inc.)

(323) 316-4514 | [www.ultralightoptics.com](http://www.ultralightoptics.com)  
Clinician: Dr. Marie Fluent



**CLINICAL PROBLEM:** I find LED lights a useful adjunct to dental loupes. However, I find myself not wearing my previous LED light because it is too bulky and heavy.

**SOLUTION:** The *Feather Light LED* is the most comfortable LED light I have encountered. It is light weight yet durable enough to withstand an accidental drop. One of my favorite features is its hands free on-off feature on the battery pack. It provides excellent illumination even in the absence of an overhead light, making it ideal for use on pediatric patients being examined while in parents arms, special needs patients in wheel chairs and mission dentistry.

## TheraCal LC (Bisco Dental Products)

(800) 247-3368, (847) 534-6000 | [www.bisco.com](http://www.bisco.com)  
Clinician: Dr. Sabiha S. Bunek

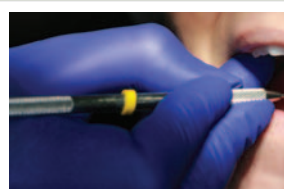


**CLINICAL PROBLEM:** It is time consuming to place a liner under deep restorations because most materials on the market have to be hand mixed or triturated.

**SOLUTION:** *Theracal LC* is one of my favorite products on the market. It is a resin-modified calcium silicate filled material ideal for indirect and direct pulp capping, and as a base/liner. When preparations are close to the pulp, I generally use a glass ionomer or CaOH as a liner to promote dentinal healing and to reduce post-op sensitivity. I find *Theracal LC* easier to use than other materials because it is dispensed in a flowable syringe, allowing for direct placement over the affected area. It is light cured so I can control my working time. This product is easy to use and provides me with consistent, effective results.

## Ultraform Powder-Free Nitrile Examination Gloves (Microflex/BarrierSafe Solutions, Inc.)

(800) 876-6866 | [microflex.com/BetterThanSkin.com](http://microflex.com/BetterThanSkin.com)  
Clinician: Dr. John A. Molinari, Peri D. Nelson

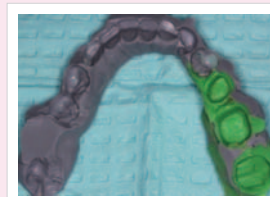


**CLINICAL PROBLEM:** Dental Professionals often have difficulty finding nitrile gloves that fit their hands while still providing excellent tactile sensation.

**SOLUTION:** *Ultraform Powder-Free Nitrile Examination Gloves* are incredibly thin gloves with textured finger tips that provide increased tactile sensation without the loss of durability. The flexibility of the material also allows you to select a tighter fit with minimizing the potential for hand fatigue. *Ultraform®* is available in the following sizes – XS, S, M, L, and XL.

## Flexitime (Heraeus)

(800) 431-1785 | [www.heraeusdentalusa.com](http://www.heraeusdentalusa.com)  
Clinician: Dr. Jim Olsen



**CLINICAL PROBLEM:** When I have large restorative cases I often need to make multiple pours of an impression to get several study models. Finding a material that holds up well without tears or distortion is the challenge on these cases.

**SOLUTION:** *Flexitime* is a great choice of material for multiple pours of study models. It has great detail so it can be used for a working model as well. I find the combination of the heavy body and light body materials is ideal for quadrant trays on single unit cases as well. I also like to use the heavy body as a pre-op bite registration material for multiple unit cases, or in situations where I'll be prepping a second molar. Sequential relines using light body in the pre-op bite registration are easy, predictable, and accurate. Finally, I will also use the Monophase material for a bite registration when I'm creating an appliance for my TMJ patients, when I need a material that will easily let the patient be guided into the desired bite position.

## Renamel Microfill (Cosmedent, Inc.)

(800) 621-6729 | [www.cosmedent.com](http://www.cosmedent.com)  
Clinician: Dr. Robert J. Stevenson



**CLINICAL PROBLEM:** Anterior composite restorations look good at time of placement but lose their luster over time.

**SOLUTION:** With the current buzz of nano-composites “polishing like a microfill,” sometimes it’s just better to reach back to one of the best microfills. Perfectly matched to the vita shade guide, *Renamel Microfill* provides stiff, non-sticky handling that sculpts and holds its shape prior to curing. *Renamel Microfill* polishes to an incredible luster, and unlike many composites, often improves over time with no concern of a shade shift.

## Gluma PowerGel Desensitizer (Heraeus)

(800) 431-1785 | [www.heraeusdentalusa.com](http://www.heraeusdentalusa.com)  
Clinician: Dr. Sabiha S. Bunek



**CLINICAL PROBLEM:** I like using glutaraldehyde-based desensitizers but I want a product that will ensure precise placement.

**SOLUTION:** The newly formulated *Gluma PowerGel* is my go-to product for patients experiencing cervical sensitivity. For cases that do not warrant a restoration, an application of *Gluma PowerGel* provides immediate relief, as reported by patients. The material is dispensed in a flowable syringe with a microbrush tip, allowing for accurate placement, and now comes in a gel consistency, ensuring the material stays where it is placed. One of my favorite features is new green color of *Gluma PowerGel*. It allows me to see where it is placed as well as confirm that it has been rinsed off properly. The gel can be used with all bonded restorations as well. Lab testing done at THE DENTAL ADVISOR showed that the use of *Gluma PowerGel* had no adverse effects on the bond strength to dentin.

## BEAUTIFIL Flow Plus (SHOFU DENTAL CORPORATION)

(800) 827-4638, (760) 736-3277 | [www.shofu.com](http://www.shofu.com)  
Clinician: Dr. Mike Koczarski



**CLINICAL PROBLEM:** Class V restorations can be cumbersome to place with conventional composite due to handling characteristics, and time spent finishing and polishing excess material.

**SOLUTION:** I prefer *BEAUTIFIL Flow Plus* for Class V restorations because of its strength, and excellent handling characteristics. Unlike most traditional flowable composite, *BEAUTIFIL Flow Plus* has a high viscosity so it stays where you place it (no slumping). It also releases fluoride which is beneficial especially because most Class V lesions are in an area that can be more susceptible to caries. It is available in two viscosities, *Zero Flow (F00)* for stacking and *Low Flow (F03)* for when you desire a traditional flowable. It also comes in an assortment of shades, including opaque shades.

## SureFil SDR flow (DENTSPLY Caulk)

(800) 532-2855 | [www.caulk.com](http://www.caulk.com)  
Clinician: Dr. Peter Yaman



**CLINICAL PROBLEM:** Placing a posterior composite can be time consuming and should be done in incremental layering to minimize post-operative sensitivity.

**SOLUTION:** *SureFil SDR flow* can be bulk filled up to 4 mm, is easy to place, self-levels even on maxillary teeth, and there are no voids. To complete the restoration, a veneer approximately 1 mm thick is placed using a conventional composite to establish the correct contour and shade of the final restoration.

## Quick Up (VOCO)

(888) 658-2584 | [www.vocoamerica.com](http://www.vocoamerica.com)  
Clinician: Dr. Brent Kolb

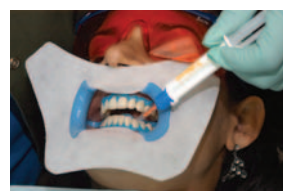


**CLINICAL PROBLEM:** It is difficult to know what to use for overdenture attachment pick-ups. Often multiple products have to be purchased to complete the procedure, and the products expire, are lost or don't get stored together in the office. Then, when it's time to do an overdenture attachment pick up chairside, the staff is scrambling to get the correct products for the doctor.

**SOLUTION:** *Quick Up* is an all-in-one system. A denture pick up for dummies kit. Everything is stored in the same box with easy-to-follow instructions and pictures. Dentists who have been reluctant to try chairside attachment pickups or those who may have stopped doing them due to technical difficulty can rest easy. This product will take the stress out of this often difficult procedure.

## BEYOND Polus Whitening Accelerator with BEYOND Treatment Kits (BEYOND Dental & Health)

(281) 277-4352 | [www.beyonddent.com](http://www.beyonddent.com)  
Clinician: Jennifer N. Ireland

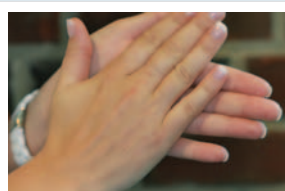
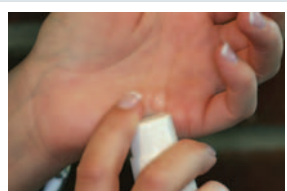


**CLINICAL PROBLEM:** Often, in-office whitening is a long process and patients experience discomfort and sensitivity.

**SOLUTION:** The *BEYOND Whitening System* is effective and whitens in as little as 3, 10-minute sessions. The *BEYOND Treatment Kit* comes complete with everything necessary for effective isolation, including patient eye and face protection and liquid dam material that flows well while remaining intact throughout the procedure. The whitening gel dispenses via a dual-barrel syringe and has excellent viscosity, is easy-to-place and stays put. The *BEYOND Polus Whitening Accelerator* uses light with three different intensities: gentle, normal and intense. The gentle setting is great for patients prone to sensitivity. Patients truly appreciate the quick procedure, excellent whitening results and minimal to zero sensitivity.

## fiteBac SkinCare Germicidal Hand Softening Gel (fiteBac SkinCare, LLC)

(855) 222-1640 | [www.fitebac.com](http://www.fitebac.com)  
Clinician: Dr. John A. Molinari, Peri D. Nelson



**CLINICAL PROBLEM:** Dental professionals often develop skin dryness from repeated handwashing and need a long-lasting hand lotion that does not interfere with donning gloves.

**SOLUTION:** *fiteBac* is an effective skin lubricant with prolonged anti-microbial activity. It allows powder-free gloves to slip on effortlessly after hand-washing and application of this hand softening gel. *fiteBac* is alcohol-free; therefore, it does not dry out your hands. Our laboratory testing showed that this gel is effective for 8 hours against harmful bacteria even after multiple hand washings.

## GrandioSO Heavy Flow (VOCO)

(888) 658-2584 | [www.vocoamerica.com](http://www.vocoamerica.com)  
Clinician: Dr. Michelle Elford



**CLINICAL PROBLEM:** Some flowable composites are too runny for use in maxillary restorations. They do not stay put.

**SOLUTION:** The increased viscosity of *GrandioSO Heavy Flow* is ideal in situations when you want a flowable composite that stays in place and does not require a lot of sculpting. I love the handling of this material, especially in certain maxillary restorations where I prefer the use of a flowable composite. The reduced flowability of this material saves me time because there is less excess, runny material to remove or shape. *GrandioSO Heavy Flow* is available in syringes and compules, and comes in multiple shades.

**BRAVO***(SciCan, Inc.)*(800) 572-1211, (810) 214-2194 | [www.scican.com](http://www.scican.com)

Clinician: Dr. John A. Molinari, Peri D. Nelson



**CLINICAL PROBLEM:** Many dental offices have a problem with wrapped instruments routinely coming out of the sterilizers wet.

**SOLUTION:** *BRAVO* is an efficient pre- and post- vacuum autoclave that is quiet with a cycle that completely dries wrapped instruments prior to their removal. Plus, with a 10"x13.5" chamber it's big enough to fit numerous cassettes of all sizes or large loads of wrapped instruments. Best of all, Bravo has the option for an automatic drainage system, so there is no necessity for manually draining the reservoir.

**PowerDent Pulse Multi™***(Harrison Hygiene)*(888) 725-7656 | [www.powerdentpulse.com](http://www.powerdentpulse.com)

Clinician: Dr. Michelle Elford



**CLINICAL PROBLEM:** Some patients have complained of a "dirty film" inside their night guards that does not come off with a regular toothbrush.

**SOLUTION:** The *PowerDent Pulse Multi™* is a power toothbrush designed specifically for cleaning oral appliances, including night guards, dentures, and retainers. It is battery operated and uses pulse technology to remove plaque, stains, and debris. I use one for my acrylic night guard and my son uses one on his soft ortho retainer. We both love it! It is easy to use, cleans effectively, and does not scratch the appliance. I am now recommending this product to all patients with oral appliances.

**NV Microlaser***(Zila Inc.)*(970) 212-4500 | [www.zila.com](http://www.zila.com)

Clinician: Dr. Peter Yaman



**CLINICAL PROBLEM:** Soft tissue overgrowth around prepared teeth and implants makes impression taking difficult and can compromise the accuracy of the final impression.

**SOLUTION:** *NV Microlaser* is the easiest to use of all lasers that I have tried. Assistants love it since the set up time is minimal, it has no cords or plugs, it uses disposable tip and it has easy activation. I use it regularly to manage soft tissue prior to impression taking and for soft tissue contouring for esthetic cases. Healing time is fast and patient discomfort is minimal. It is lightweight (1.9 ounces) and fits well in my hands.

## PC-4000

### *Panoramic Corporation*

(800) 654-2027 | [www.pancorp.com](http://www.pancorp.com)

### Description

The **PC-4000** Digital Panoramic Imaging System combines a legacy of proven reliability with cutting edge digital technology that consists of an X-ray generator, a Cadmium Telluride (CdTe) sensor and a software/computer/monitor complex. The X-ray generator is designed to be extremely durable and to produce consistently precise X-ray energy output. The CdTe sensor is designed to minimize light distortion by directly converting x-ray energy into electronic digital output providing improved image clarity and contrast. The sensor produces over 300 image frames per second for a multi-layered panoramic image that allows selective enhancement of the different layers. The complete **PC-4000** installation package includes a properly matched computer system with pre-loaded imaging software that allows two-dimensional (2-D) rotation and multi-focal layer imaging for adjustment and correction along with dual focus operation, magnification and spinal compensation. The system features a menu with touch pad activation and LED readouts for selection of image type and kVp settings. Temple adjustments and a disposable bite guide aid in patient positioning. The provided imaging software is compatible with most popular practice management software, and it is TWAIN and DICOM compliant. Panoramic Corporation offers the system with all-inclusive pricing that includes shipping, installation, training, a 2-year part and labor warranty, a Dell computer and flat panel monitor as well as the Platinum Care Package (Free Phone & Online support and access to their nationwide service network). The **PC-4000** was used by 17 consultants during a six-month evaluation period. It received a 90% clinical rating.

### Equipment Features

The **PC-4000** is a reliable system for producing 2-D panoramic images as well as TMJ and bitewing views. The quality of the panoramic images was rated very good. The unit requires little floor space and is simple to operate. Patient positioning is done manually by sliding the temple supports into position. The operator then reads the corresponding scale to select the proper kVp setting. The unit can accommodate patients over six feet tall in a standing position. Settings are easily entered, and the image is captured quickly, appearing on the monitor simultaneously with exposure. The resulting image may be enhanced through tools in the software before saving the image into the practice management system. Users were especially impressed by the one-click EV Clarity tool that removes distortion from the spinal column. Bridging software performed very well during the evaluation. Panoramic radiographs included a complete view of all anatomical structures expected for this type of image. A software upgrade and additional chin rest and forehead support enable the unit to take a bitewing-type image. This consists of separate left and right exposures that eliminate overlap in the bicuspid/molar areas. Consultants found this useful for cases in which traditional bitewings are not possible. Seventy-seven percent of consultants found **PC-4000** to be better than their film-based panoramic system, while 6% reported it was equivalent. Eighty-two percent of consultants would switch to **PC-4000**, and 94% would recommend this product.

++ ++



### Consultants' Comments

*"Incredibly simple to use."*

*"Image appears instantly."*

*"Bitewing feature is a bonus."*

*"Panoramic Corporation technical support is very responsive."*

*"Image quality can be automatically set with the Equal Vertical button, but some adjustments may be necessary."*

*"Temple supports are stiff to slide, but this rigidity keeps the patient aligned and still during imaging."*

*"I observed overlap of teeth in the bicuspid area."*

*"Provide a quick reference guide for the various images."*

### Clinical Tips

- Make any desired enhancements before saving the image.
- If the patient is between settings on the kVp scale, select the lower setting. ■

# G-CEM Automix

**GC America Inc.**  
(800) 323-7063, (708) 597-0900 | [www.gcamerica.com](http://www.gcamerica.com)

## Description

**G-CEM Automix** is a dual-cured, fluoride-releasing, self-adhesive resin cement. Indications include cementation of ceramic-metal, zirconia and all-ceramic restorations, and metal/fiber and ceramic endodontic posts. The cement contains functional monomers (phosphoric acid ester) for self-adhesive properties to dentin and enamel. According to the manufacturer, this formulation increases the initial hydrophilicity of the cement, allowing penetration into dentinal tubules before the material sets and becomes hydrophobic. The dual-cured mode allows for easy clean-up and higher strength within the first 10 minutes. **G-CEM Automix** is available in shades A2 and translucent. The **G-CEM Automix** kit comes with two, 2.7 mL syringes and 20 mixing tips. This study determined the long-term clinical performance of **G-CEM Automix** for cementation of restorations at two years. **G-CEM Automix** received a 98% rating for clinical performance at two years.

## Clinical Evaluation Protocol

- Sixty-five restorations were cemented with **G-CEM Automix**. Restorations included 49 zirconia-based restorations, 12 lithium disilicate restorations and four ceramic-metal restorations (Figure 1).
- Restorations were placed on 47 posterior and 18 anterior teeth (Figure 2).
- Fifty-two restorations cemented with **G-CEM Automix** were evaluated after two years in service. Eighteen of these restorations were in place for over two years.
- Restorations were evaluated on a 1-5 rating scale: 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent.

## Clinical Observations

### Retention

None of the restorations cemented with **G-CEM Automix** debonded during the two-year recall period (Figure 3). One five-unit bridge fractured; however, this failure was not the result of debonding.

### Esthetics

All restorations received excellent ratings for esthetics (Figure 3). The cement did not alter the esthetics of the restoration. No discoloration was reported over the two-year period.

## 2-year Clinical Performance

+++++

## Consultants' Comments

- "The shade of the cement has been stable over the past two years."
- "**G-CEM Automix** was easy to use at placement and continues to maintain optimal esthetics and function."

## Patients' Comments

- "No problems with my crown. It feels great."



Zirconia-based restorations on 10 and 11 seated with **G-CEM Automix** at 2 years.

FIGURE 1: Restorations Placed with **G-CEM Automix**

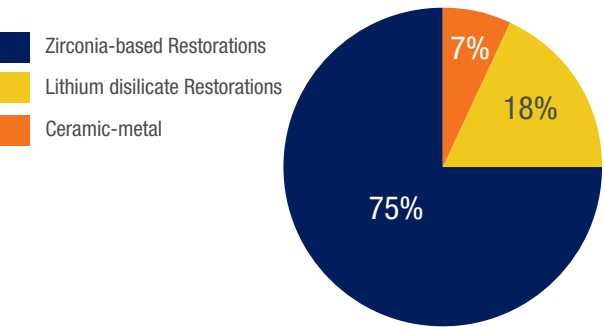
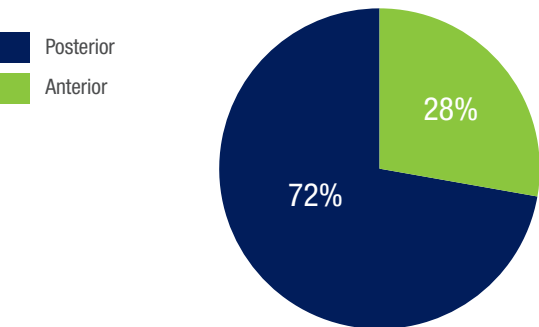


FIGURE 2: Distribution of Restorations Placed with **G-CEM Automix**



## G-CEM Automix 2-year Clinical Performance *(cont.)*

### Resistance to Marginal Discoloration

The margins of the restorations maintained their optimal esthetics over the two-year period (Figure 3).

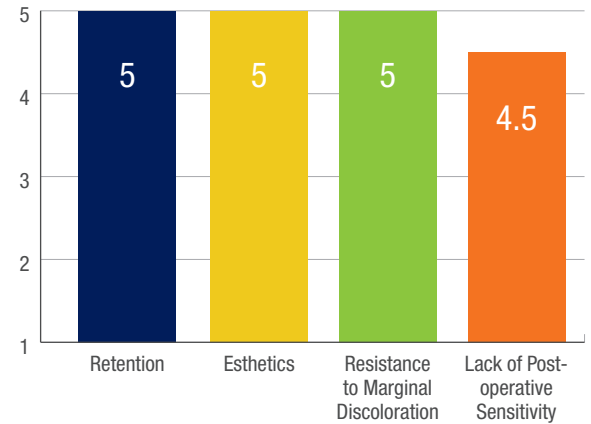
### Lack of Post-operative Sensitivity

**G-CEM Automix** provided very good results relating to the lack of post-operative sensitivity (Figure 3).

### Summary

Fifty-two of 65 restorations cemented with **G-CEM Automix** were evaluated after two years. All restorations received excellent ratings for esthetics and resistance to marginal staining over the two-year period. No restorations debonded and very little sensitivity was reported. ■

FIGURE 3: Results of **G-CEM Automix** at 2 years



## CoForm

### Directa Dental

+46-8-50650575 | [www.directadental.com](http://www.directadental.com)

### Description

**CoForm** is a transparent incisal angle matrix form made from celluloid plastic. It is indicated as an aid in Class IV composite restorations. The matrix is transparent to allow light-curing and does not stick to the resin composite. **CoForm** matrices are pre-cut for mesial or distal angles in four sizes for various anterior teeth. Each box contains 128 matrices in a clinical dispenser. **CoForm** was evaluated by 21 consultants in 297 uses. It received a 90% clinical rating.

### Product Features

**CoForm** is a convenient option to help form the composite when placing Class IV restorations. Once the proper size is selected, the cervical extent can be trimmed with scissors and then held in place by hand or with a wedge. Especially with some of the creamier composites, a pre-formed matrix aids in handling and forming the material. Size selection is extensive. Many consultants found the numbering and organization of the kit to be confusing, and they re-labeled the boxes with tooth numbers to hasten selection chairside. The forms worked best when the contact area of the tooth was light or missing. Fit to the incisal edge was considered ideal, and visibility through the clear matrix was excellent. Forty-three percent of consultants found **CoForm** to be better than their current method of placing Class IV composites. Fifty-seven percent would switch to **CoForm**, and 67% would recommend it.

### Clinical Tip

- Trimming the cervical portion properly is key. ■



### Consultants' Comments

*"Made repairing incisal fractures very easy and predictable."*

*"Easy to place and remove."*

*"Softer composites are easier to pack into the form."*

*"Hard to pass through an interproximal contact."*

*"Poor identification system for forms - size selection is confusing."*

# Venus® Bulk Fill

**Heraeus**

(800) 431-1785 | [www.heraeusdentalusa.com](http://www.heraeusdentalusa.com)

## Description

**Venus Bulk Fill** is a low stress, flowable posterior composite used as a base in Class I and II restorations. The product can be placed in 4 mm increments and is used in conjunction with a universal restorative material as the surface layer. The composite is a radiopaque nano-hybrid composite. **Venus Bulk Fill** has self-adapting characteristics to enable the material to adapt to the cavity walls. It is available in 1.8 g syringes and 0.25 g unit-dose (PLT) in a universal shade. Halogen and LED light-curing units must produce at least 550 mW/cm<sup>2</sup> for curing in 20 seconds. **Bulk Fill** was evaluated by 30 consultants in 609 uses. It received a 91% clinical rating.

| Suggested Retail Cost                                                                                                                                   |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>Venus® Bulk Fill</b> PLT Intro Kit<br>(15 x 0.25 gm; 5 x 0.25gm Venus Diamond® PLT's - Shade A2;<br>1 x 2ml iBOND® Self Etch or Total Etch bottle)   | \$152.53 |
| <b>Venus® Bulk Fill</b> PLT Refill (10 x 0.25gm)                                                                                                        | \$69.55  |
| <b>Venus® Bulk Fill Syringe</b> Intro Kit<br>(3 x 1.8 gm; 5 x 0.25gm Venus Diamond® PLT's - shade A2;<br>1 x 2ml iBOND® Self Etch or Total Etch bottle) | \$152.53 |
| <b>Venus® Bulk Fill</b> Syringe Refill (1 x 4gm)                                                                                                        | \$32.29  |

## Product Features

Consultants reported that **Venus Bulk Fill** was easy to place. The composite wets the tooth surface and adapts to the cavity preparation well with no visible bubbles. The 4 mm depth of cure is useful in deep restorations. The low viscosity of the composite allows self-leveling but can also slump and flow out of the matrix if light curing is delayed. **Venus Bulk Fill** is highly translucent and will not mask stained dentin. Thirty-seven percent of consultants reported that the **Venus Bulk Fill** was better than their current bulk-fill resin composite and 50% reported it was equivalent. Seventy percent would switch to the **Venus Bulk Fill** and 83% would recommend it.

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## Consultants' Comments

- "Easy to use and easy to place."
- "Flows nicely – adapts well to cavity preparation."
- "I like the ability to fill cavity in 4 mm increments, a real time saver."
- "Material is translucent; cannot use for anterior restorations."
- "May flow outside of the matrix band unless tightly adapted."

## Clinical Tips

- Use a sectional matrix for the best interproximal contact.
- Keep the tip submerged during dispensing to minimize formation of air bubbles. ■



## Infection Control with Dr. John Molinari

### U.S. Measles Alert

The CDC and local health agencies are on heightened alert for the possibility of an outbreak of measles this year. The potential for large numbers of Americans traveling to Europe to attend the Olympics and other large sporting events has infectious disease specialists and epidemiologists concerned about exposure of unvaccinated people to others in a continent where measles is much more prevalent. There were 26,000 illnesses and 8 deaths attributed to measles last year in Europe. In contrast, there were 222 cases of measles reported in 2011 in the United States. Most of the cases here were among or linked to travelers returning from or visiting from other countries, including countries in Europe and Southeast Asia. These cases remind us that it is very important to vaccinate children and adults to protect them against measles. Europe, in particular, has had much lower vaccination rates than the U.S. since the 1998 publication of

# Gluma PowerGel Desensitizer

**Heraeus**

(800) 431-1785 | [www.heraeusdentalusa.com](http://www.heraeusdentalusa.com)

## Description

**Gluma Desensitizer PowerGel** contains the same active ingredients as traditional Gluma Desensitizer but in a gel form. The glutaraldehyde gel treats dentinal hypersensitivity by precipitating plasma proteins, resulting in decreased permeability and inhibited fluid flow into the dentinal tubules. It is indicated for the treatment of hypersensitive dentin in cervical areas and in teeth prepared for direct or indirect restorations. **Gluma Desensitizer PowerGel** is dispensed from a 1 g syringe through a brush-tipped cannula. Application requires isolation of the soft tissue, placing **Gluma Desensitizer PowerGel** onto the affected area for 30-60 seconds, followed by thorough rinsing. Each package contains four syringes of desensitizer and 20 applicator tips with illustrated instructions. **Gluma Desensitizer PowerGel** was evaluated by 27 consultants in 476 uses. This desensitizer received an 86% clinical rating.

**Suggested Retail Cost** \$142.12/package

## Product Features

**Gluma Desensitizer PowerGel** is an effective desensitizer for cervical areas and under restorations. The new gel formulation is intended to increase control and accuracy of placement. The green color of the gel is visible on the tooth and helps ensure complete rinsing. During dispensing, it is hard to control the amount dispensed from the syringe. The viscous gel must be spread on the tooth with the brush tip. Because the tip is large, the gel sometimes contacts the cervical gingiva. Fifty-six percent of consultants rated **Gluma Desensitizer PowerGel** as better than their current desensitizer, and 26% reported it was equivalent. Seventy-four percent of consultants would switch to **Gluma Desensitizer PowerGel**, and 85% would recommend it.

## Clinical Tips

- Avoid contact of **Gluma Desensitizer PowerGel** with soft tissue; severe irritation will occur. Rubber dam isolation is recommended.
- Do not use metal applicator tips.
- For application into small areas, dispense gel into a dappen dish and use a small brush. ■



## Consultants' Comments

*"Consistently effective."*

*"Rinses away cleanly."*

*"Gel stays where placed."*

*"Sometimes too much gel is expressed from the syringe."*

*"Rubber dam isolation is not always practical."*

*"Brush tip is too large."*



## Editors' Note

*Use caution to avoid contact of glutaraldehyde-containing solutions with mucous membranes, skin and eyes.*



the now-retracted paper in *The Lancet*, which purported a link between autism and the measles, mumps, rubella vaccine. Even though the described "research" was found to be fraudulent, many parents continue to refuse to vaccinate their children, choosing instead to rely on "herd immunity" conferred by the general population. Thus, even though the ongoing transmission of endemic (native) measles was declared eliminated in the U.S. in 2000, the disease is still common in many other countries and can be imported into the U.S. by foreign visitors or returning travelers who are not fully protected against the disease. Close to 90% of the measles cases reported in the U.S. have been either acquired abroad or linked to imported cases.

## TurboTemp 3

### Danville Materials

(800) 827-7940, (925) 973-0710 | [www.danvillematerials.com](http://www.danvillematerials.com)

### Description

**TurboTemp 3** is a syringeable bis-acryl composite for chairside provisional restorations. It is available in six shades: A1, A2, A3, A3.5, B1 and Bleach. **TurboTemp 3** is supplied in 50 mL cartridges that fit 10:1 automix guns. **TurboTemp 3** is indicated for the fabrication of provisional crowns, bridges, inlays, onlays, partial crowns, and veneers. It is recommended for short-term use, up to 30 days. Working time is 40 seconds. The provisional restoration can be removed from the mouth during the elastic phase at two minutes; final hardness occurs at five minutes. Maximum span recommended is a three-unit bridge. A refill package includes one cartridge of material with 10 mixing tips. **TurboTemp 3** was evaluated by 29 consultants in 613 uses. This provisional material received a 91% clinical rating.

Suggested Retail Cost \$149.95/refill

### Product Features

**TurboTemp 3** produces provisional restorations that have very good reproduction of detail and polish to a smooth finish. When the recommended removal and setting times are followed, the resulting provisional is strong and fits well. If removed or trimmed too early, fracture is likely to occur. Consultants would have liked a shorter setting time. The surface smoothness and presence of an oxygen-inhibited layer were inconsistent. Final shade match of **TurboTemp 3** was rated very good. The limitations on span and durability require dentists to keep another material on hand for long-term and long-span use. Twenty-one percent of consultants rated **TurboTemp 3** as better than their current provisional material, and 45% reported it was equivalent. Forty-five percent would switch to **TurboTemp 3**, and 76% would recommend it to a colleague.

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### Consultants' Comments

*"Very good esthetics - resists staining."*

*"Easy to trim and polishes nicely."*

*"Patients commented that it feels smooth."*

*"Easy to dispense and mix - not easy to break."*

*"The provisional restorations had great fit and retention."*

*"You cannot use this material for long-span bridges."*

*"A quicker setting time would be better."*

### Clinical Tips

- Remove from the mouth before final setting occurs.
- Rotary finishing and polishing can be done after the five-minute setting time. ■

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## MIXPAC Colibri™

### Sulzer Mixpac AG

+41 81 772 20 00

[http://www.sulzerchemtech.com/en/desktopdefault.aspx/](http://www.sulzerchemtech.com/en/desktopdefault.aspx/tabid-3251/5965_read-18425/)

tabid-3251/5965\_read-18425/

### Description

**MIXPAC Colibri** mixing tips have an integrated needle tip for intraoral placement of automixed materials. They are designed for precise application of materials dispensed from 1:1 dual-barrel syringes and cartridges, including silicone impression materials, core materials and resin cements. The innovative design eliminates the need for attaching separate intraoral tips by seamlessly integrating medical-grade stainless steel intraoral needles on traditional color-coded mixing tips (brown, light blue, and yellow). The needles are available with 17- or 20-gauge lumens, rotate 360° and are bendable to the desired angle. Consultants evaluated the 17- and 20-gauge brown tips for syringes and 20-gauge blue and 17-gauge yellow tips for cartridges. Twenty-eight consultants used **MIXPAC Colibri** in 647 uses. The product received an 86% rating.

### Product Features

**MIXPAC Colibri** provides an all-in-one mixing tip with no assembly required for intraoral delivery. This promotes clinical efficiency and eliminates the risk of the tip coming off during extrusion of the material.

#### Suggested Retail Cost

Contact company for cost

The tips must be paired properly with the material to ensure that proper mixing occurs. The long, narrow needle tips are specifically indicated for use in post spaces. Consultants found them most useful for post cementation, although they were also useful for general procedures. Consultants used the brown tips on syringes of resin cement and core material. The smaller 20-gauge tip is effective for low viscosity cements while the larger lumen is necessary for thicker cements and core materials. The yellow mixing tips are used mainly for placement of light body impression material. Only 10% of consultants found a use for the light blue tips. Each mixing tip is individually packaged in a clear wrapper for clean storage and easy identification. Forty-six percent of consultants found **MIXPAC Colibri** mixing tips to be better than their current intraoral tips and 25% reported that they were equivalent. Forty-six percent would switch to **MIXPAC Colibri** and 61% would recommend the product to a colleague.

### Clinical Tips

- Order samples from your OEM manufacturer or retailer to check compatibility with your syringes and cartridges.
- Use the yellow tips for sub-gingival placement of impression material. ■

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### Consultants' Comments

*"Precision placement of impression material enhances detail."*

*"No assembly required."*

*"Tip holds the bend perfectly and never crimps or breaks."*

*"Needle tip is long - allows improved visibility of working area."*

*"Some materials are hard to dispense through the narrow tips."*

*"Tips did not fit all of our syringes."*

*"Provide a compatibility chart for tips and syringes/cartridges."*

Ivoclar Vivadent, Inc.  
(800) 533-6825, (716) 691-0010 | www.ivoclarvivadent.com

Description

IPS e.max Press (Ivoclar Vivadent) is a high-strength, lithium disilicate ceramic used for anterior and posterior restorations as well as anterior three-unit bridges. IPS e.max Press can be overlaid with IPS e.max Ceram to optimize esthetics. This product received a 97% clinical rating.

Clinical Evaluation Protocol

- Four dentists placed 671 IPS e.max restorations in 282 patients over a five-year period.
- Three hundred eighty-one restorations were evaluated (Figure 1).
- Sixty-eight percent of these were in function for five years while the remaining 32% were in function for less than five years (Figure 1). The restorations represented a variety of anterior and posterior crowns as well as inlays and onlays (Figure 2).
- Before cementation the internal surfaces of all restorations were etched with 5% hydrofluoric acid gel for 20 seconds, then rinsed and coated with a silane (Monobond Plus). All were cemented with either self-adhesive resin or esthetic resin cements (Figure 3). Esthetics, resistance to fracture or chipping, resistance to marginal discoloration, lack of sensitivity, and retention were evaluated and rated on a 1 to 5 scale (1=poor, 2=fair, 3=good, 4= very good, 5= excellent).

Results at Five Years

**Esthetics**  
Ninety-seven percent of the IPS e.max Press restorations received a five or an excellent rating (Figure 4). The restorations were not only clinically acceptable but also of superior esthetic quality. Many patients remarked positively on the esthetics of the restorations. Figure 5 shows an IPS e.max Press onlay at five years. Only 6% of the restorations were slightly opaque and lacked sufficient translucency, which could be a function of ingot selection.

5-year Clinical Performance

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Consultants' Comments

"Good combination of esthetics and durability."

"Very versatile, highly esthetic material. I use it for most of my anterior and posterior restorations."

Patients' Comments

"The crown looks great and blends in perfectly with my other teeth."

"I love the color of my crown and that there is no gray line."

FIGURE 1: Number of Restorations at Five-year Recall

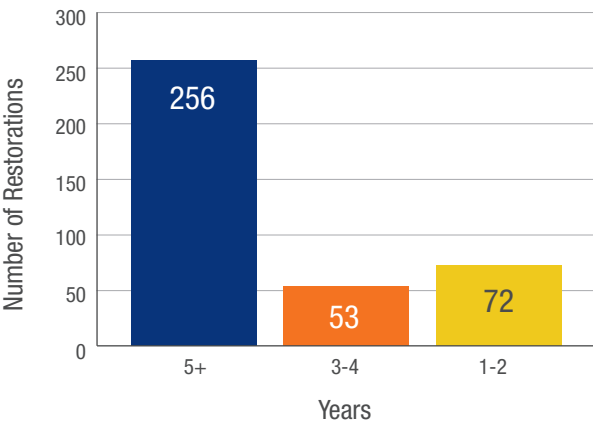


FIGURE 2: Distribution of Evaluated Restorations

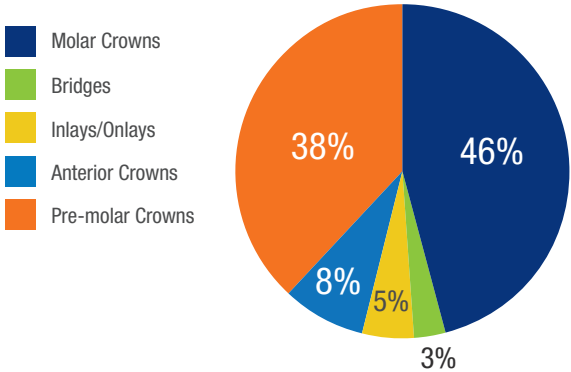
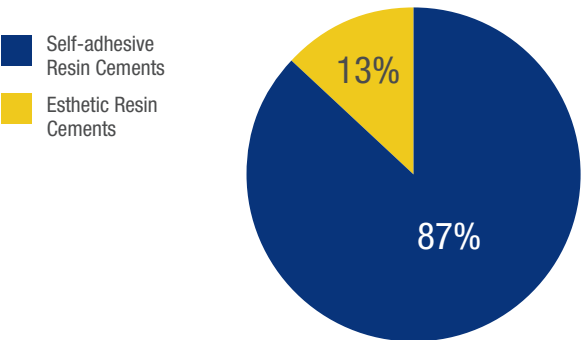


FIGURE 3: Cements Used



## IPS e.max 5-year Clinical Performance *(cont.)*

### Resistance to Fracture/Chipping

Of the 381 restorations evaluated, seven fractured and were replaced over the 5 year period (Figure 4). Only 1.5% of the restorations exhibited some chipping and these were smoothed and polished. Less than 2% fractured and were replaced. This fracture rate is less than half the average fracture rate of ceramics documented by THE DENTAL ADVISOR over the past 27 years.

### Resistance to Marginal Discoloration

The lack of marginal discoloration of the restorations was excellent in 96% of the cases (Figure 4). Leakage at the margins is not just related to the fit but more to the bonding and the resin cement. In 2% of the recalled cases, some graying at the margins was noted but none necessitated their replacement at five years.

### Lack of Sensitivity

Only seven cases (1.5%) of postoperative sensitivity were reported by patients (Figure 4). All except for one were mild in nature and subsided over time.

### Retention

Twelve restorations (4%) debonded and needed to be recemented (Figure 4). This debonding rate is similar to debonding rates of other all-ceramic restorations monitored over 27 years by THE DENTAL ADVISOR and is related to the preparation and the cement rather than the ceramic.

## Summary

**IPS e.max Press** has proven to be a very esthetic, high-strength, durable material with excellent clinical performance over the five years. Its performance has exceeded that of traditional PFM restorations as well as many all-ceramic restorations. **IPS e.max Press** is highly recommended by THE DENTAL ADVISOR. ■

FIGURE 4: *IPS e.max Press* Five-year Recall

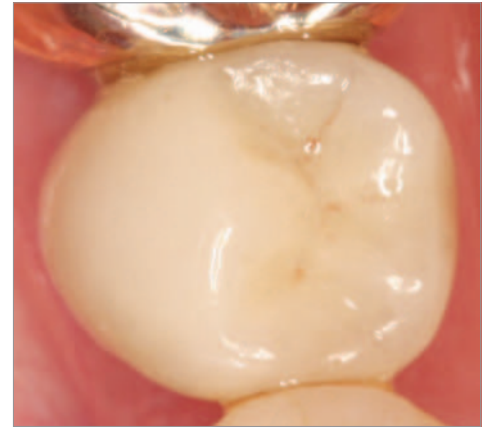
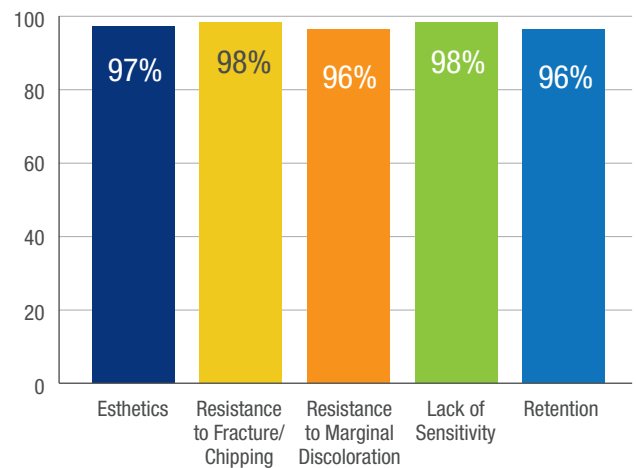


FIGURE 5: No. 29 *IPS e.max* at 5 years.



## THE DENTAL ADVISOR'S Speaker's Bureau

### Lecture Topics

The Speakers' Bureau offers continuing education courses on a wide variety of topics for dentists, hygienists, assistants, lab technicians, and office teams. Each topic can be 1-2 hour, half-day and full-day lectures. Topics can be combined and adapted for a custom presentation.

*To book a Dental Advisor speaker, or for more information, contact:*

**Jennifer Ireland**, Lecture Coordinator  
(734) 665-2020 ext. 107  
jennifer@dentaladvisor.com



## Ultraform® Powder-Free Nitrile Examination Gloves

**Microflex**

(800) 876-6866 | [microflex.com/BetterThanSkin.com](http://microflex.com/BetterThanSkin.com)

### Description

**Ultraform® Powder-Free Nitrile Examination Gloves** are non-sterile, single use, ambidextrous, non-latex gloves with textured fingertips. The gloves are made of a soft, light-weight material and are designed to increase fine motor task performance. **Ultraform®** gloves are available in a cobalt blue color in 300-count boxes of extra-small, small, medium, large and 250-count box of extra-large. **Ultraform®** gloves were evaluated by 43 consultants in over 3800 uses. **Ultraform® Powder-Free Nitrile Examination Gloves** earned a 95% clinical rating.

Suggested Retail Cost

Box of 300: \$24.00

### Product Features

**Ultraform® Powder-Free Nitrile Examination Gloves** are strong, lightweight nitrile gloves. Consultants found **Ultraform®** to be noticeably thinner than other gloves, providing an excellent tactile sense. The softness and flexibility of the material enhance fit and comfort. Gloves are easy to don and remove. Very few reports of rips or tears were reported; most tears were related to donning the gloves. Sixty-nine percent of users who were between glove sizes found that sizing down helped them find a glove that fit comfortably. Eighty-one percent of consultants found **Ultraform®** to be better than other nitrile gloves and 74% could perform tasks better with them. Eighty-nine percent of consultants would switch to **Ultraform®**, and 98% would recommend them.

### Clinical Tips

- If your hand is between sizes, choose the smaller size.
- Pull gently when donning **Ultraform®**. ■

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### Consultants' Comments

*"Gloves are soft and light-weight."*

*"No strain on my hands."*

*"The most comfortable nitrile gloves I have ever used."*

*"They do not feel like a typical nitrile glove; they are made of a very thin material, offer good tactile sense, provide better fit with less hand fatigue."*

*"Easy to get on and off, with no tearing!"*

*"Great color!"*

*"Fit at wrist is loose."*

### SPECIAL THANKS TO:

#### Senior Clinical Consultants:

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