THE DENTAL ADVISOR™

"Improving Patient Care Through Research & Education"



Photography by Dr. George Poy

Focusing on Composite Cores

Improvements in resin composites and compatible bonding agents have made composite cores the material of choice for rebuilding and strengthening broken-down teeth before placement of an extra-coronal restoration. Desirable characteristics of composite cores include: esthetics, ease of placement, immediate crown preparation, high strength, and direct bonding to tooth structure. Today, there are many composite core buildup materials available to the dentist with a variety of features to consider, such as packaging, delivery technique, curing mode, availability of accessories, and cost.

This issue of THE DENTAL ADVISOR addresses relevant clinical questions, focuses on ideal features of composite cores, and provides useful clinical tips in using composite core materials.

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(Dispensing system)

An Editors' Choice award is given to products recognized by our editors as being a unique or significant product.

RATINGS

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

THE DENTAL ADVISOR

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Composite Cores

Based on a survey recently conducted by THE DENTAL ADVISOR we have compiled a list of frequently asked questions regarding composite core materials. Answers were provided by our editorial board.

Questions & Answers

Q: When using a composite core material for post cementation, what should I look for in selecting a core material and bonding agent?

A: The most important factor in using composite core materials for cementation of posts is that the material completely cures in a dark, anaerobic post space environment. For this reason, you should only use a dual- or self-cured composite core material in the post space. Along these lines, make sure that the bonding agent used is compatible with the core material and that it is dual-cured. If used correctly, this type of restoration bonds the tooth to the post to the composite core material and can be a strengthening option for the tooth.

Q: I use regular composite material in increments for building up a core. I feel that most core materials are too soft, weaker, and leave voids. Is there anything I need to be concerned about when using this method?

A: Most dentists use composite core materials instead of restorative composite because composites formulated as core materials cut easier when preparing the tooth for a crown, and the dual- and self-cured products can be bulk cured. Some core materials are softer than others. In fact, there is a wide range of viscosities available for composite core materials. In general, the core materials that are light-cured tend to be more viscous, and "packable," if that is what you are looking for. The dual- and self-cured products tend to be less viscous (in general) and are best placed with a Centrix type syringe or a mixing tip to inject the material to place. In this way, there are usually less voids present.

However, if you feel more comfortable using a restorative composite to place core build-ups, there are no disadvantages to this procedure technically, except possibly a slightly more difficult time cutting through the composite while preparing the crown. The time involved in incrementally curing and higher cost are other possible disadvantages.

Q: On occasion, I have had my core buildup pop off during the impression-taking process or when the temporary is removed. How can I prevent this from happening?

A: This is a catastrophic problem for a restorative dentist. To prevent this from occurring, you should always use a bonding agent that is compatible with the core material that you use. In general, it is best to stick with the manufacturer's recommendations for a compatible bonding agent. Some basic rules to follow:

- Follow manufacturers' instructions.
- Use similar curing modes for core materials and bonding agents.
- In general, light-cured modes for composites and bonding agents produce highest bond strengths.
- In general, self-cured modes for composites and bonding agents produce weakest bond strengths.

Visit our Product Comparison Tables or the online issue at www.dentaladvisor.com for more information on dual-cured and self-cured composite cores and bonding agents.

Q: I sometimes have voids in a composite core that I notice after preparing the core/tooth for a crown. Do you have any recommendations to help with this problem?

A: You might try using a more flowable core material with an auto-mix syringe delivery system that will allow you to place the material directly into the preparation, decreasing the chances of voids. Because of the low viscosity of the material, a matrix is recommended to contain it during placement. Place the core material in 1- to 2-mm increments and light-cure each increment.

Ideal Features

- Dual-cured
- Availability of tooth-colored and contrasting shades
- High flexural and compressive strengths
- Cuts similar to dentin
- Fluoride-releasing

Advantages & Disadvantages of Composite Cores

ADVANTAGES	DISADVANTAGES
• Can be prepared immediately • Strong bond to tooth structure when used with proper bonding system • Good shade under ceramic • Self-, light- and dual-cured formulations	• Requires dry field • Technique sensitive • Requires bonding agent • Polymerization shrinkage • Potential for marginal breakdown, if crown preparation is delayed

Consultants' Comments

- "I find small angled tips to be very effective when used to extrude material into a post space; manufacturers should consider including them in every kit."
- "I use composite cores that are dual-cured, fluoride-releasing and have an option of one color that contrasts dentin."
- "I would like to see a wider shade selection, especially when you need to use the core material under an all-ceramic restoration."
- "I like my core material to be stackable, yet flow onto the floor of the preparation."

Clinical Tips

- If placing a post and core, the most important antirotational feature is a ferrule added circumferentially around the buildup, at least 1 to 2 mm in height.
- To save material and ensure good margin visibility, place the composite core material after the tooth has been prepared for a crown.
- For large cores, build incrementally, curing each layer to allow the material to be stacked.
- When using intraoral tips in the canal before post placement, use slow, steady pressure as the tip is moved from an apical to a more coronal position to allow for the escape of trapped air.
- For the best results in deep dentin, use a dual-cured bonding agent.
- The fluoride release and rechargeability available from composite core materials is substantially lower then those found in glass and hybrid ionomers.

Composite Cores

Product	Company	Packaging	Shades	Fluoride	Type & Cure	Rating
ALPHA-CORE DC	Dental Technologies	Cartridge	2	Yes	DC	88%
Absolute Dentin	Parkell	Cartridge	3	Yes	DC	na
Build-It FR	Pentron Clinical Technologies	Cartridge, Dual-barrel syringe	5	Yes	DC	91%
Clearfil PhotoCore PLT	Kuraray America	Unit-dose	1	No	LC	97%
CompCore AF SyringeMix Stack	Premier Dental Products	Auto-mix syringe	3	Yes	DC	95%
Core Paste Syringeable	Den-Mat Holdings, LLC	Auto-mix syringe	2	Available	DC, SC	93%
CoreRestore2	Kerr Corporation	Syringe	3	No	DC, LC	na
CoreX	Temrex	Syringe, Unit Dose	1	No	LC	na
CosmeCore	Cosmedent	Auto-mix cartridge	3	No	DC	na
ENCORE D/C Automix	Centrix	Cartridge	2	Yes	DC	na
FluoroCore 2	DENTSPLY Caulk	Dual-barrel syringe	2	Yes	DC	na
FormCore DC	J. Morita USA	Dual-barrel syringe	1	No	DC	93%
HardCore	Pulpdent Corporation	Tub	1	Yes	DC	na
LIGHT-CORE	Bisco Dental Products	Syringe, Unit-dose	2	No	LC	na
LuxaCore Z-Dual	DMG America/DMG	Cartrige	3		DC	98%
MultiCore Flow	Ivoclar Vivadent	Cartridge	3	Yes	DC	94%
ParaPost ParaCore	Coltene/Whaledent	Dual-barrel syringe	2	Yes	DC	96%
ROCK CORE	Danville Materials	Cartridge	1	No	DC	na
Rebilda DC	VOCO America	Cartridge, Dual-barrel syringe	3	Yes	DC	96%
Ti-Core Auto E	Essential Dental Systems	Dual-barrel syringe	1	Yes	DC	91%
Ti-Core Auto White	Essential Dental Systems	Dual-barrel syringe	1	Yes	DC	na
Ti-Core Natural	Essential Dental Systems	Syringe, Tub	2	Yes	SC	89%

Visit our Product Comparison Tables or the online issue at www.dentaladvisor.com for more information on dual-cured and self-cured composite cores and bonding agents.



Build-It FR
(*Pentron Clinical Technologies*)



Rebilda DC
(*VOCO America*)

FLASHlite Magna™ LED Dental Curing Light + + + + 1/2

Editors' Choice

Discus Dental, LLC.
800.422.9448 • 310.845.8200
www.discusdental.com

Description

The ***FLASHlite Magna™ LED Dental Curing Light*** is a cordless, light-emitting-diode (LED) curing light for the polymerization of composite and adhesive restorative materials containing the photo-initiator camphorquinone. The pen-style unit is 22-cm long and weighs 121 g. It contains three LED lights and has an average output of 1500 mW/cm^2 over the entire 11-mm beam providing 1,425 mW of total power. The ***FLASHlite Magna LED light*** has a wavelength range of 440-490 nm. The manufacturer recommends five hours to fully charge the lithium-ion battery when new or fully discharged. A full charge is indicated by a visible green light and lasts for approximately 30 minutes of use. During operation, an audible beep is heard every five seconds and after 20 seconds, the light automatically shuts off. The ***FLASHlite Magna*** is supplied with the lens cap attached as well as a charger base with a built-in radiometer, AC/DC wall plug adapter, one replacement lens cap, an amber light shield, a multi-tiered hardness curing disk, and operations manual. Disposable tacking tips are available and are sold separately. ***FLASHlite Magna*** was evaluated by 15 clinical consultants in over 680 uses to cure adhesive dental restorations. This product received a 92% clinical rating.

Suggested Retail Cost
- $895.00

Product Features

The ***FLASHlite Magna*** received the highest ratings for light intensity and beam width as well as portability of the unit and ease of use (on/off). Thirteen out of 15 consultants answered yes when asked if they felt the ***FLASHlite Magna*** was a good value compared to other LED curing lights. The pen style of ***FLASHlite Magna*** provided good access to most areas of the mouth, but some consultants commented that they preferred a pistol-grip light with a thinner neck and swivel tip.



Consultants' Comments

- *"This is a great light!"*
- *"Broad tip cures the entire restoration - no need to cure each half of the restoration separately."*
- *"The portability and ease of use sell it."*
- *"It is an efficient unit."*
- *"I used this light on a mission trip I took recently. It proved to be exceptionally portable and reliable. This kind of curing light makes doing dentistry in these kinds of situations a breeze. I was very impressed with this product!"*
- *"Difficult to comfortably reach the on/off button with small hands."*

The light is very intense and can produce heat that is noticeable to the unanesthetized patient. Seventy-three percent of consultants found ***FLASHlite Magna*** to be equivalent to or better than their current LED light. Sixty percent of our clinical consultants would switch to the ***FLASHlite Magna LED Dental Curing Light*** and 80% would recommend it to their colleagues.

Clinical Tips

- Use a hand shield or alternate eye protection instead of the enclosed light shield for easier access to difficult areas.
- Place the light in charger base to cool when not in use. ■

Quadrant Anterior Shine + + + + +

Cavex Holland B.V.
+31 (0)23 530 77 00
www.cavex.nl • www.practicon.com/cavex

Ask The Editors:
Visit online at www.dentaladvisor.com to view Q & A about this product!

Description

Quadrant Anterior Shine is a light-cured, radiopaque, micro-hybrid composite that is filled 63% by volume and 74% by weight. The composite is indicated for Class III, IV, and V restorations and is available in 15 shades: A1, A2, A3, A3.5, A4, B2, B3, C2, C4, D3, OA2, OA3.5, Dark, Incisal, and Bleach. ***Quadrant Anterior Shine*** is available in 0.25-g unit-dose capsules and 4-g syringes. This product received a 97% clinical rating.

Clinical Evaluation Protocol

- 268 ***Quadrant Anterior Shine*** restorations were placed in 123 patients.
- Class III, Class IV and Class V anterior restorations were placed (Figure 1).
- 50 restorations were available for evaluation of clinical performance up to 12 months after placement.
- Restorations were evaluated on a 1-5 rating scale: 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent.

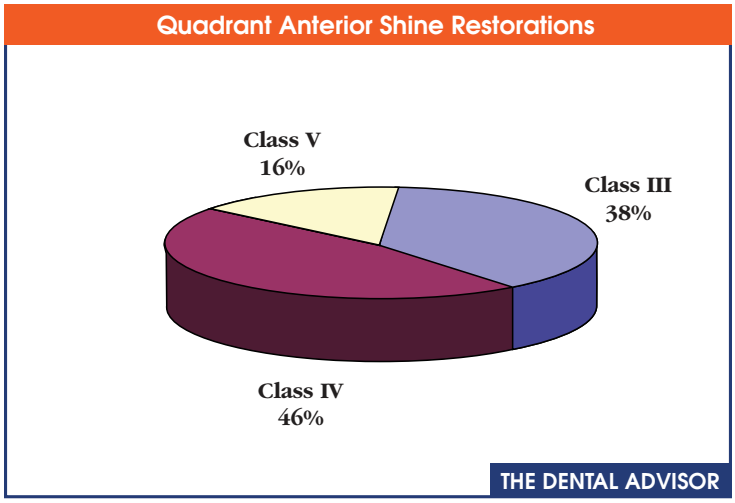


Figure 1

Clinical Observations

Fracture Resistance
The majority of ***Quadrant Anterior Shine*** restorations remained intact during the first year after placement (Figure 2). One Class III restoration fractured at five months and was replaced.



Consultants' Comments

- *"Quadrant Anterior Shine finishes to a smooth surface."*
- *"Shades blend nicely with the surrounding enamel."*
- *"Creamy composite handles well and is easy to sculpt."*

Esthetics
Quadrant Anterior Shine was used mainly in areas where esthetics was a primary concern. In most cases the composite exhibited excellent blending with the surrounding enamel. The specialty shades enhance the range of Vita shades for accurate shade matching in the majority of cases. All restorations were rated very good to excellent at recall (Figure 2).

Resistance to Marginal Discoloration
Various 5th- and 6th-generation bonding agents were used to bond the ***Quadrant Anterior Shine*** restorations. With only one exception, all restorations were resistant to staining at the cavosurface margins (Figure 2).

Wear Resistance
No visible signs of wear were noted on any of the restorations recalled (Figure 2).

Sensitivity
No post-operative sensitivity was reported when patients were queried at their recall appointments (Figure 2).

continued on page 7

1-year Clinical Performance Report + + + + +

continued from page 6

Summary

Quadrant Anterior Shine was used to place 268 restorations in 123 patients. At one-year recall, the majority of ***Quadrant Anterior Shine*** restorations remained intact during the first year after placement. No visible signs of wear were noted. Nearly all restorations were resistant to staining at the cavosurface margins. In most cases the composite exhibited excellent blending with the surrounding enamel. No post-operative sensitivity was reported. ■

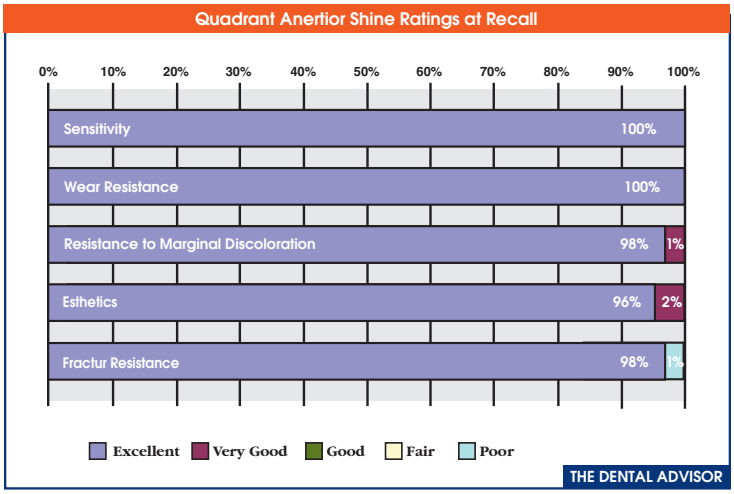


Figure 2

FL-Bond II + + + + 1/2

Shofu Dental Corp.
800.827.4638
www.shofu.com

Description

FL-Bond II is a 6th-generation, light-cured self-etching bonding system for use with direct composite restorations and for cementation of indirect restorations with light-cured resin cements. The material is classified as a GIOMER, containing pre-reacted glass ionomer filler that is reported to increase fluoride release. The ***FL-Bond II*** kit contains one 5-mL bottle each of primer and adhesive, a mixing well with cover and 50 color-coded applicator brushes. Application consists of applying the primer and leaving it for 10 seconds, air drying, applying the bonding agent, and light curing for 10 seconds. Refrigeration is required. Twenty-five consultants evaluated ***FL-Bond II*** in 514 restorative and cementation procedures. This product received a 92% clinical rating.

Suggested Retail Cost
- $150.00 /kit

Product Features

FL-Bond II is very easy to use and instructions are straightforward, with a reasonable amount of time required for the bonding procedure. The primer is colorless and has a low viscosity for good initial wettability of the tooth surface. The bonding agent has a yellow color and is relatively thick, but is applied easily and should not be blown with air. The primer contains an ethanol solvent, producing a mild odor. Matrix bands are easy to remove after restorative procedures, with minimal adhesion to the bonding agent.



Consultants' Comments

- *"Easy system to use, even with two steps."*
- *"Nice dispensing and viscosities!"*
- *"Bonding agent is very sensitive to ambient light."*

Consultants reported minimal or no post-operative sensitivity during the evaluation period. The refrigeration requirement was a drawback of the product compared with other bonding agents. Eighty-four percent of consultants rated ***FL-Bond II*** to be the same as or better than their current 6th-generation bonding agent. Thirty-two percent indicated they would switch to ***FL-Bond II*** and seventy-two percent would recommend it to a colleague.

Clinical Tip

- Phosphoric acid etching is optional but recommended in instances where there is unprepared enamel in the cavity preparation. ■

Clearfil Majesty Esthetic with Clearfil SE BOND and Clearfil S³ BOND

Kuraray America, Inc.
800.879.1676 • 212.986.2230
www.kuraraydental.com

Ask The Editors:
Visit online at www.dentaladvisor.com to view Q & A about this product!

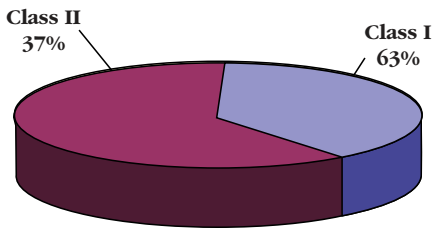
Description

Clearfil Majesty Esthetic is a universal, light-cured, nano-hybrid, radiopaque composite for anterior and posterior use. ***Clearfil Majesty Esthetic*** is available in 18 shades: A1, A2, A3, A3.5, A4, B1, B2, B3, C3, T, E1, E2, E3, OA2, OA3, OA4, BL1, and BL2. The composite can be applied in a single shade or layered for complex esthetic cases. ***Clearfil Majesty Esthetic*** is available in 2-mL (3.6-g) syringes or kits of 20, 0.26-g unit-dose tips. This product received a 96% clinical rating.

Clinical Evaluation Protocol

- 175 ***Clearfil Majesty Esthetic*** restorations were placed in 67 patients.
- *Clearfil S3 BOND* (89%) and *Clearfil SE BOND* (11%) were used to bond all restorations.
- Class I and Class II posterior restoration were placed.
- 59 restorations were available for evaluation of clinical performance up to 19 months after placement (Figures 1 and 2).
- Restorations were evaluated on a 1-5 rating scale: 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent.

Distribution of Clearfil Majesty Esthetic Restorations (59)



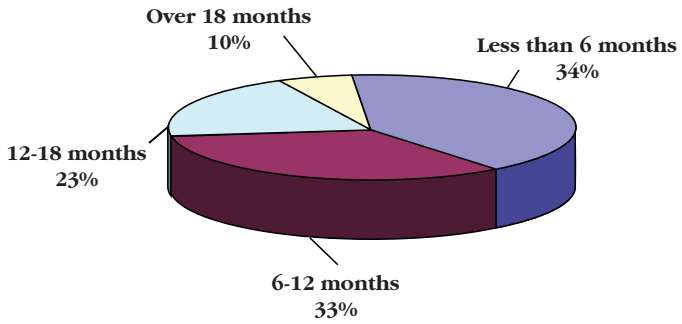
THE DENTAL ADVISOR

Figure 1

Consultants' Comments

- *"Clearfil Majesty Esthetic is a great universal composite."*
- *"Nice consistency for placement."*
- *"With this assortment of shades, I can match any tooth."*
- *"I have had no post-operative sensitivity when using these self-etching bonding agents."*

Age of Clearfil Majesty Esthetic Restorations (59) at Recall



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Figure 2

Clinical Observations

Fracture Resistance
No chips or fractures were seen in any of the ***Clearfil Majesty Esthetic*** posterior restorations recalled (Figure 3). Even in large posterior restorations, this material showed early durability under function.

Esthetics
The esthetics of ***Clearfil Majesty Esthetic*** were rated very good (Figure 3). In most cases the composite exhibited excellent blending with the surrounding enamel. Ten percent of the restorations were noted to be too translucent. The opaque Vita shades are useful in reducing unwanted translucency.

Resistance to Marginal Discoloration
Clearfil S³ BOND and *Clearfil SE BOND* were used to bond ***Clearfil Majesty Esthetic*** restorations without the use of phosphoric acid etching of peripheral enamel. All restorations were resistant to staining at the cavosurface margins (Figure 3).

Wear Resistance
No visible signs of wear were noted on 59 of the 60 restorations recalled (Figure 3). Minor occlusal wear was recorded on one restoration.

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1-year Clinical Performance Report + + + + +

continued from page 8

Sensitivity
No post-operative sensitivity was reported for either *Clearfil SE BOND* or *Clearfil S3 BOND* when patients were asked at their recall appointments (Figure 3).

Summary

Clearfil Majesty Esthetic is a universal composite. All of the restorations were placed with *Clearfil SE BOND* or Clearfil S³ BOND. Both bonding agents contain a self-etching component, and no separate etchant was used on the enamel surfaces. The restorations were evaluated as the patients reported for their next scheduled dental appointments. No restorations failed during this recall period. All categories evaluated, including esthetics, resistance to wear, marginal discoloration and fracture, and lack of sensitivity, received high ratings. ■

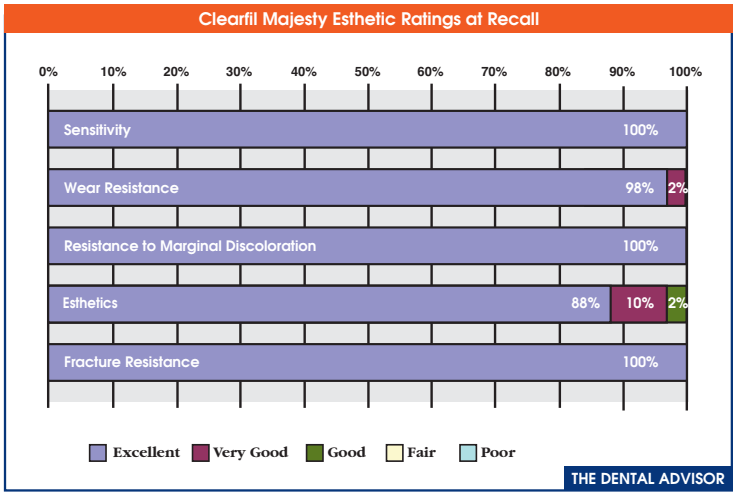


Figure 3

Greater Curve Tofflemire Band + + + + 1/2

Greater Curve
866.493.3437
www.greatercurve.com

Request a Sample:
Visit www.dentaladvisor to request a sample or more information!

Description

Greater Curve is a Tofflemire band indicated for use in placing direct composite restorations. The accentuated curve throughout the band allows for greater cervical seal of restorations. This design allows for restorations to be placed without using wedges to keep the band adapted to the cervical area of a tooth preparation. The extra curvature of ***Greater Curve*** allows for isolation of subgingival preparations and at the same time creates the correct emergence profile of the restoration. Each package includes eight dozen bands. Twenty-eight consultants evaluated ***Greater Curve*** in over 100 uses. This product received a 92% clinical rating.

Suggested Retail Cost
- $35.00/96 bands

Product Features

Consultants found that the ***Greater Curve*** Tofflemire band adapted tightly to the cervical area of preparations without the placement of a wedge. The band is as easy to place as a traditional Tofflemire band. While the thickness of the band helps it maintain its contour, some consultants preferred a thinner band that is more malleable.

Consultants' Comments

- *"Great for subgingival restorations."*
- *"It produces a cervical seal without a wedge."*
- *"Useful for large, deep class IV restorations - does a good job of producing the correct emergence profile."*
- *"Nice product for certain situations but will not replace all of my bands."*
- *"Sometimes the band slips from the Tofflemire retainer."*

The technique, suggested in the directions, of cutting a small hole in the matrix near the contact point after the band is placed, was received with mixed reactions. Most consultants noted that this product was extremely useful in certain difficult-to-restore situations, along with being excellent for creating the correct emergence profile in subgingival restorations. Seventy-two percent of consultants found ***Greater Curve*** to be as good as or better than their current band, while 61% of consultants would recommend or switch to it.

Clinical Tip

- View the manufacturer's website for techniques to enhance interproximal contacts. ■

ExciTE VivaPen + + + + +

Editors' Choice

Ivoclar Vivadent, Inc.
800.553.6825 • 716.691.0010
www.ivoclarvivadent.com

Description

ExciTE VivaPen is a 5th-generation bonding agent packaged in a pen-style dispenser that allows dispensing the exact amount of material required. The Intro Pack contains a 2-mL ***ExciTE VivaPen***, 2 g of Total Etch, 80 brush cannulas, and 10 etch cannulas. A click button on the side of the VivaPen dispenses the material, saturating the brush. Once the material is dispensed, the brush can be used to uniformly distribute the bonding agent to the area. Application time is 10 seconds, followed by air drying and 10 seconds of light curing. Twenty-eight clinical consultants evaluated ***ExciTE VivaPen*** in placing 726 restorations. This product received a 96% clinical rating.

Suggested Retail Price
- $145.00/Intro Pack

Product features

ExciTe VivaPen packaging, convenience of dispensing and time required for bonding procedure received the highest rating among the clinical consultants. A click of the VivaPen button dispenses a single drop of Excite onto the prepared tooth. The pre-bent disposable brush cannula locks onto the VivaPen hub that rotates for optimal positioning. The viscosity of the bonding agent is very good, wetting the tooth well and leaving a uniform glossy surface after light curing. Ninety percent of consultants rated the VivaPen dispensing system to be the same as or better than the system they are currently using, and 77% said they would switch to ***ExciTE VivaPen***. ■

Consultants' Comments

- *"I love the dispenser!"*
- *"No wasted material."*
- *"Fine brush tip fits into conservative preparations."*
- *"Bend the cannula tip for access to deep proximal boxes in the posterior."*
- *"Include an indicator for the volume of product remaining."*

Cervitec Plus + + + +

Ivoclar Vivadent, Inc
800.533.6825 • 716.691.0010
www.ivoclarvivadent.us.com

Description

Cervitec Plus is a new dental varnish for desensitization of cervical surfaces of teeth. It contains both chlorhexidine (1%) and thymol (1%) and is appropriate for patients of all ages. This new formula is colorless and reportedly has improved adhesion to tooth surfaces and tolerance of moisture during application. The chlorhexidine may cause reversible discoloration of teeth or restorations. ***Cervitec Plus*** is available in unit-dose and multi-dose units for placement with a disposable dental applicator. It has a shelf-life of one year if not stored in a refrigerator and two years if refrigerated. Patients should refrain from eating or drinking for one hour after treatment. Thirty-two consultants utilized ***Cervitec Plus*** unit dose with 295 patients during the evaluation period. This product received an 87% clinical rating.

Suggested Retail Price
- $149.50/20 unit-dose kit

Product Features

Consultants found the manufacturer's instructions, packaging and color to be above average. The unit-dose packaging eliminated the need for a dappen dish and was very convenient. The ease of use and the lack of patient discomfort were rated very highly. Consultants were pleased with the clear shade, viscosity, and adherence to teeth. Consultants noted that not every patient experienced relief after application. Effectiveness of desensitizing teeth appears to depend on the individual patient more than case selection or symptoms. However, consultants reported that the short-term effects observed in patients were typical of similar products. Many patients reported that the taste during application was unpleasant. Eighty-three percent of consultants found ***Cervitec Plus*** to be equal to or better than their current desensitizer and 48% would recommend ***Cervitec Plus*** to others.

Consultants' Comments

- *"Dispensing from the disposable, single-patient pack is very nice."*
- *"The unit-dose container stands up on the tray."*
- *"I would like the solution to be more viscous."*
- *"Effectiveness was inconsistent."*

Clinical Tips

- Dry the tooth well before application.
- Refrigerated material will feel cold on the patient's teeth. Remove the material from the refrigerator and allow it to warm up before using. ■

Silginat + + + + 1/2

Kettenbach USA
877.532.2123 • 714.892.9820
www.kettenbachusa.com
www.kettenbach.com

Description

Silginat is an addition silicone elastomeric impression material intended to be used as an alternative to traditional alginate materials. ***Silginat*** is available in 38-mL cartridges which are designed to reduce waste and are compatible with a standard 1:1 dispensing gun and in 362-mL foil bags to be used in most commercial mixing machines. The cartridge version provides adequate material for two quadrant impressions or one full-arch impression. ***Silginat*** offers the ability to store the impression before immediately pouring it, unlike a traditional alginate material. Multiple models can be poured from a ***Silginat*** impression. Twenty-two editors evaluated ***Silginat*** in nearly 400 clinical situations. This product received a 91% rating.

Suggested Retail Cost
- $70.00/Foil bag intro kit; $189.00/Foil bag bulk kit
- $40.00/Cartridge intro kit; $140.00/Cartridge bulk kit

Editors' Observations

Manufacturer's Instructions/Packaging
The instructions are clearly written, explaining the working and setting times. The 38-mL cartridges slide into the dispensing gun easily and are convenient to use. Most editors found the 38-mL cartridge to contain an adequate amount of material.

Ease of Dispensing and Mixing/Ease of Use
Dispensing the material from the cartridge was easy and convenient.

Homogeneity of Mix/Viscosity of Material
Silginat dispenses in a homogeneous mix. The creamy nature of the impression material was consistent between cartridges. The viscosity was found to be good for most clinical situations.

Ease of Loading Impression Trays
Loading of impression trays was very similar to other medium body addition silicone elastomeric impression materials.

Working Time/Setting Time
Working time was found to be adequate for placement and manipulation of material (border molding) if desired. Most editors found that the setting time was slightly slower when compared to traditional alginate material.

Lack of Bubbles and Voids/Detail Quality of Impression
The majority of the editors found the detail of impressions to be very good; however, some impressions had drags at the cervical areas of the teeth.



Editors' Comments

- *"Silginat captures excellent detail."*
- *"Impression is stable enough to pour more than once."*
- *"I didn't have to mix anything and the dispensing is easy."*
- *"I would like a shorter setting time."*

Firmness of Set Material/Ease of Removal from Mouth
Silginat was found to set up quite firmly. This occasionally made it more challenging to remove from the mouth as compared to alginate, but it was similar to impression material used for crown and bridge impressions. Some editors suggested a softer version for periodontally-involved teeth. Editors commented that removing models from the impression was more challenging than with their traditional alginates. However, this procedure was found to be simpler than removing traditional crown and bridge impressions.

Taste/Odor
No editor made any reference to a discernable odor associated with ***Silginat***, and there were no comments made about patient dislike of the taste. ■

sani-treet GREEN + + + +

enzyme industries, inc
888.236.9963
www.enzyme industries.com



Description

sani-treet GREEN is a multi-purpose cleansing solution intended for use as an instrument pre-soak, an evacuation system cleaner, and an ultrasonic cleaner solution. It is non-toxic, non-caustic and biodegradable. ***sani-treet GREEN*** should be diluted (one ounce per one gallon of water) for daily use. The solution has a lemongrass-lavender scent. The solution is sold in a gallon plastic jug with a pump dispenser or in single-dose, one-ounce packs. Twenty-eight consultants and their staff used ***sani-treet GREEN*** for 870 routine in-office cleaning protocols. ***sani-treet GREEN*** received an 87% clinical rating.

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Whip Mix Model 2240 Q Articulator + + + +

Whip Mix
800.626.5651 • 502.637.1451
www.whipmix.com

Description

The ***Whip Mix Model 2240 Q Articulator*** is a semi-adjustable articulator with *QuickMount* magnetic plates. This is an arcon-type articulator, with the condylar element in the upper member and a fixed intercondylar distance of 110 mm. This model features the "Accumount" Mounting System for interchanging mounted casts between articulators. The *QuickMount* plate holder, which is used in place of regular mounting plates with screws or knobs, is attached to the upper and lower members of the articulator. The *QuickMount* plates are held in place by the magnets. Mounted casts can be removed from the articulator by breaking the magnetic contact. The upper frame can easily be set at an open position for convenience during laboratory procedures. The ***Model 2240 Q Articulator*** has an ergonomic frame design which offers interframe spacing of over 4 inches allowing easy mounting, rounded edges and frame corners so that visibility and posterior access are increased, bilateral elastics provide optimum feel during excursive movements and can be easily detached to remove the upper frame and the quick-acting centric lock allows easy return of the articulator to centric position and simple hinge movement. Eight laboratory consultants evaluated the ***Model 2240 Q Articulator***. This product received an 86% laboratory rating.

Suggested retail cost:
- $754.75

Laboratory Comments

- *Dentists can take casts off their Model 2240 Q Articulator and send them to the lab, where they can be mounted on the same type of articulator."*
- *"Interchangeable mounting is very accurate!"*
- *"Articulator is heavy."*

Equipment Features

The ***Model 2240 Q Articulator*** features the *QuickMount* magnetic system which allows quick, precise, easy placement and removal of mounted casts. This mounting system makes it possible to interchange mounted casts between articulators without loss of accuracy. Technicians liked the ease of protrusive and excursive functions as well as the ease in setting articulator to the open position for convenience during lab procedures. The condylar guidance feature was rated highly by all technicians. Immediate side shift capability enabled with bilateral elastic function, ease of return to centric by centric latch and ergonomic design were reported to be innovative features. Fifty percent of consultants said they would switch to the ***Whip Mix Model 2240 Q Articulator***.

sani-treet GREEN + + + +

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Suggested Retail Cost
- $74.00/1 gallon with pump
- $50.00/box of 50 unit-dose packs.

Product Features

sani-treet GREEN in the pump dispenser received high ratings for ease of preparation. Instructions for use are easy to follow. Time for debridement is acceptable, and instruments rinse clean without any residue. The green color is distinctive, and the lemongrass-lavender scent is mild and pleasant, although some consultants would prefer an unscented solution. No adverse dermal or respiratory reactions to ***sani-treet GREEN*** were reported. Forty-eight percent of consultants would switch to ***sani-treet GREEN*** and 31% would recommend it to colleagues.

Consultants' Comments

- *"Mirrors come out of the solution clean!"*
- *"One solution can be used for several cleaning procedures."*
- *"Solution does not produce foam."*
- *"Nice concept … GREEN is good!"*
- *"Compatible with amalgam separators."*
- *"I prefer a clear solution in the instrument baths."*
- *"A lot of packaging for a green product."*

Clinical Tips

- Great for both oral evacuation systems and ultrasonic baths.
- For brighter instrument surfaces, soak for less than an hour.
- Mixed solutions should be used the same day. ■

FenderWedge + + + +

Directa Dental
+46 8 506 505 75 • 800 284-3368
www.directadental.com
www.jsdental.com

Description

FenderWedge is a combination plastic wedge and protective stainless steel band. The attached 0.08-mm stainless steel band acts as a barrier to protect the neighboring tooth. It is indicated for Class II restorative procedures or other restorative procedures where iatrogenic "nicking" of the adjacent tooth could occur. In addition to protection of the adjacent tooth, it pre-wedges teeth to allow for more conservative preparation and easier matrix band placement. ***FenderWedge*** comes in four color-coded sizes: x-small, small, medium, and large. Sizes of the wedges respectively are 1.0 mm, 1.4 mm, 1.9 mm and 2.3 mm, measured occlusal-cervically. Twenty-eight consultants used ***FenderWedge*** in over 530 clinical situations. This product received an 86% rating.

Suggested Retail Cost
- $34.20/ 36 count single-size kit
- $115.20/ 144 count four-size kit

Product Features

In theory, consultants found ***FenderWedge*** to be an excellent concept. The color-coded system makes it easy to distinguish the various sizes of ***FenderWedge***, and the stainless steel band does a good job of protecting the adjacent teeth. The effectiveness of pre-wedging teeth in order to more easily place a sectional matrix was found to be fairly limited. Similarly, the pre-wedging did not result in contacts that were significantly improved over usual techniques.

Consultants' Comments

- *"This is nice for protection of adjacent composite restorations."*
- *"This is a good idea, particularly for dental students."*
- *"Case selection is important - easier for small Class II preparations."*
- *"Stiff wedge can crush papilla."*

It was noted that ***FenderWedge*** was more effective at protecting the adjacent teeth in small to moderate sized preparations, but was less effective with larger preparations. Consultants found ***FenderWedge*** to be a challenge to place in situations where there was not a large gingival embrasure. In situations where there was gingival inflammation before preparing the tooth, many consultants found that gingival irritation became more extensive after placing ***FenderWedge***. Many consultants commented that they felt that they did not need to protect adjacent teeth due to their ability to control the handpiece, but felt that this would be an excellent product for the relatively inexperienced dentist in helping to prevent iatrogenic damage to the adjacent tooth. Overall, 71% of consultants rated ***FenderWedge*** as better than or equal to the current method of protecting adjacent teeth, and 75% of consultants would switch to ***FenderWedge*** or recommend it to a colleague.

Clinical Tip

- ***FenderWedge*** is not indicated for use as a matrix during the placement of restorative material. ■

SaniTyze + + + +

Crosstex
888.CROSSTEX • 631.582.6777
www.crosstex.com

Description

SaniTyze is a moisturizing, waterless antimicrobial gel intended for use by healthcare professionals. The gel contains 61% ethyl alcohol plus aloe vera, vitamin E, keratin, and liposomes to moisturize and prevent dryness. ***SaniTyze*** contains no lanolin or petroleum-based emollients, making it compatible for use with latex gloves. The citrus-scented gel is rubbed into the hands and is reported by the manufacturer to kill 99.9% of bacteria, including MRSA, within 15 seconds. ***SaniTyze*** is available in an 18-oz countertop pump dispenser. Thirty-six clinical consultants used the hand sanitizer in over 1,700 applications. This product received an 87% clinical rating.

Suggested Retail Cost
- $10.95/18-oz bottle

Product Features

The feel of their hands after use of ***SaniTyze*** was rated highly by consultants. The 18-oz countertop bottle, with included pump, allows for easy dispensing of the gel. Many consultants were not fond of the scent of the gel and time needed for hands to dry; consultants reported that the strong alcohol scent lingered for about 30 seconds after application, the time needed for hands to dry completely. However, most consultants agreed that after ***SaniTyze*** had dried, their hands felt soft and clean, making donning gloves easy.

Consultants' Comments

- *"Leaves hands feeling clean, not sticky."*
- *"My hands felt very soft afterwards - nice product!"*
- *"I like the combination of aloe vera and vitamin E."*
- *"Scent is not pleasant initially, but okay after about 30 seconds."*

Many consultants noted that after their hands were dry they liked the mild scent, which was described as a powder scent rather than citrus. Seventy-five percent of consultants rated ***SaniTyze*** equivalent to or better than the current hand sanitizer they were using, 44% indicated they would switch, and 64% would recommend ***SaniTyze*** to their colleagues. ■

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