

kuraray

Dual-Cure Resin Cement System

CLEARFIL™ ESTHETIC CEMENT EX

EXcellent Solution for Your Aesthetic Needs

- One bottle primer bonds any type of Ceramic Restoration with high bond strength (Porcelain, Zirconia, Alumina, Lucite and Lithium Disilicate).
- Virtually No Post-Operative Sensitivity with Dentin Sealing Properties.
- Good Color Stability, stain and high abrasion resistance due to highly filled/hydrophobic composite resin matrix.



KURARAY AMERICA, INC.

33 Maiden Ln, Suite 600D, New York, NY 10038 | 800.879.1676 | kuraraydental.com | ©2014 Kuraray America, Inc.

EX is your chairside solution

CLEARFIL ESTHETIC CEMENT EX gives you more confidence when cementing, due to superior bond strength and durability on all substrates (ex: enamel, dentin, porcelain and metal oxides). Kuraray's legendary adhesive technology in both **PANAVIA** and **CLEARFIL SE BOND** and original adhesive monomer **MDP**, is the key of high bond strength and long-term durability.

In addition, cementation technique has a significant effect on the fracture strength and leakage of all-ceramic restorations. The Kuraray adhesive resin cement system was reported to increase all-ceramic restorations' fracture strength and to improve marginal sealing significantly, as compared to RelyX* Unicem* and zinc phosphate. On the other hand, the fracture strength of RelyX* Unicem* was similar to that of zinc phosphate.¹⁾



1) Blatz MB *et al.*, Quintessence Int. 2008 Jan;39(1):23-32

EXpect the Best Results to Tooth

Fig. 1:
Shear Bond Strength to Human Teeth (MPa)

CLEARFIL DC BOND, a one-step dual-cured self-etch bonding agent that exhibits high bond strength and durability to enamel and dentin.

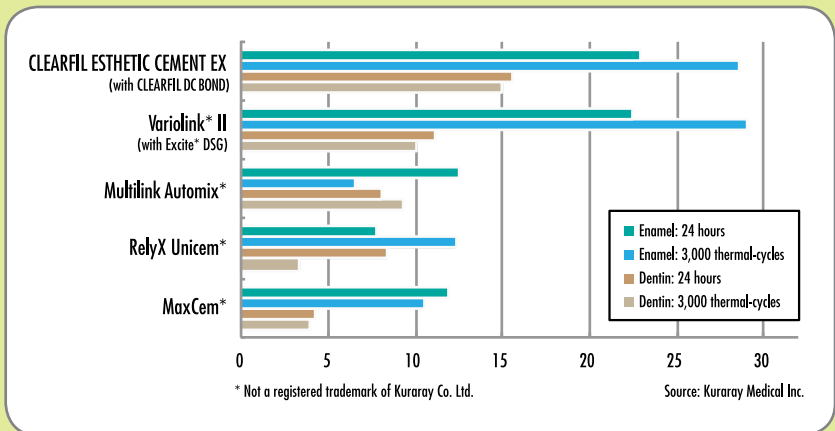
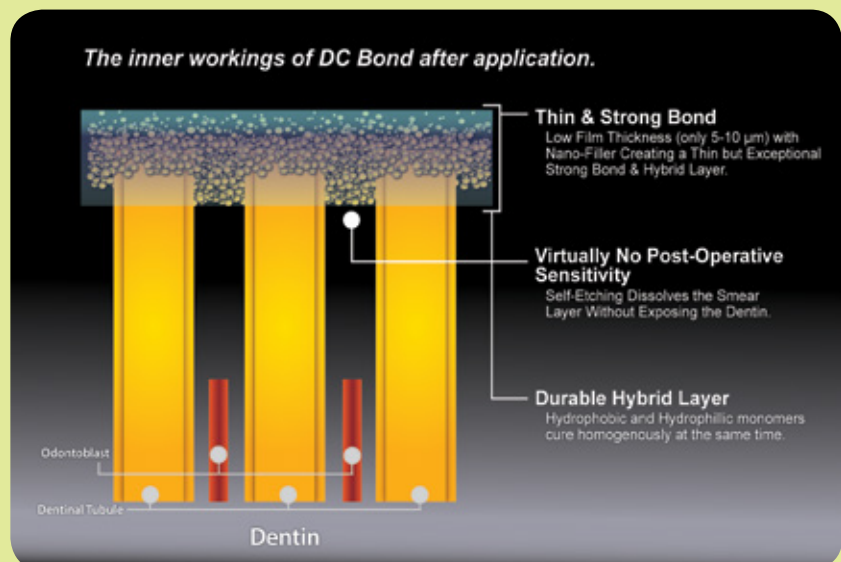


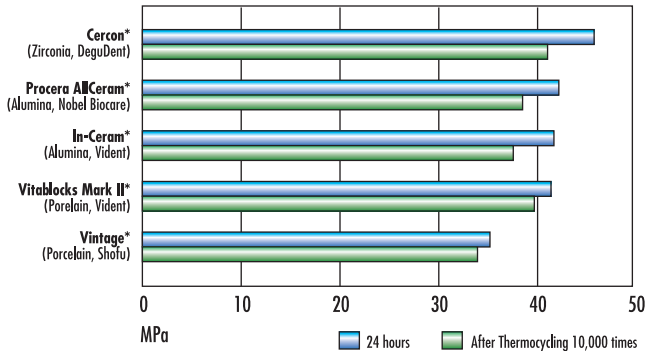
Fig. 2:
Mechanism of Dentin Adhesion

Separation of hydrophilic and hydrophobic components is often perceived as the imperfection of one-step self-etch bonding agents; however, **Kuraray's Molecular Dispersion (MD) technology** allows the bond liquid to remain homogeneous after evaporation of the solvent, thereby contributing to a strong durable hybrid bond layer.



EXcel in all your Ceramic Cementation

Fig. 3: Shear Bond Strength to Different Ceramic Restorations



K. YOSHIDA and M. ATSUTA, Nagasaki University, Graduate School of Biomedical Sciences, Japan; *Int J Prosthodont* 2007; 20:417-418

Product Name	Indications ²⁾		Waiting after application	Ingredients	Acidity ³⁾ (pH)
	Porcelain, Etchable-ceramics	Zirconia/Alumina			
CLEARFIL CERAMIC PRIMER	✓	✓	Not Needed	MDP, γ -MPS, Ethanol	Not applicable ⁴⁾
Monobond* S (Ivoclar)	✓		60 sec	γ -MPS, Water, Acetic Acid, Ethanol	4.7
RelyX* Ceramic Primer (3M)	✓		Not Needed	γ -MPS, Water Ethanol	4.5

²⁾ Official information from the manufacturer (IFU, MSDS, brochure) as of January 2011.

³⁾ Source: Kuraray Medical Inc.

⁴⁾ Not applicable because it does not contain water. As a result the liquid is chemically stable, which assures consistent high performance through out the shelf-life.

CLEARFIL CERAMIC PRIMER is the only product which received "5-Stars" and was top-ranked in this category, according to 2009 Reality. CLEARFIL CERAMIC PRIMER works with crowns and bridges made of all ceramics, thanks to a **Dual Monomer system**. In addition, CLEARFIL CERAMIC PRIMER is chemically stable and works immediately on application.

Dual Monomer System Works for all Metal-Free Surfaces

- Proved by independent data. (Fig. 3)
- Contains two adhesive monomers.
- MDP (Kuraray's original phosphoric acid monomer) bonds to Zirconia and Alumina.
- γ -MPS (Silane coupling agent) bonds to Lucite, Lithium disilicate and Feldspathic Porcelain.

Long Shelf-life, Works Immediately on Application

- CLEARFIL CERAMIC PRIMER is an outstanding product, since Kuraray R&D group succeeded in solving the challenges associated with one-bottle silane systems.
- Because CLEARFIL CERAMIC PRIMER does not contain "water," the deactivation reaction of γ -MPS is limited. This makes CLEARFIL CERAMIC PRIMER chemically stable and effective even after being stored at 50°C (122°F) for 2 months.***
- In addition, MDP is a stronger acid than acetic acid; no waiting is required after applying.

* Not registered trademarks of Kuraray Co. Ltd.

*** Source: Kuraray Medical Inc.

CLEARFIL CERAMIC PRIMER



Performance, simplicity and affordability all in one product - Key factors for future success of CAD/CAM era.

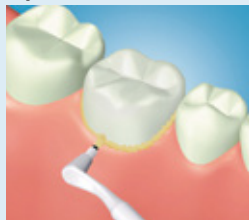


CLEARFIL DC BOND



Highlights of Cementation Procedure

Try-in



Try-in, wash and dry

For Ceramic

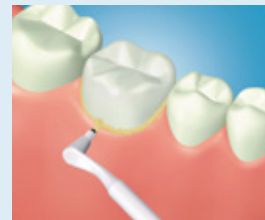


As necessary, sandblast, ultrasonic and dry.



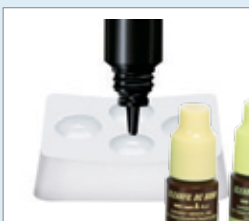
Etch, wash and dry. Apply primer and air-dry.

Cementation

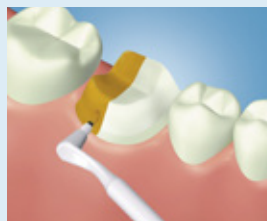


Seating and removal of excess cement.

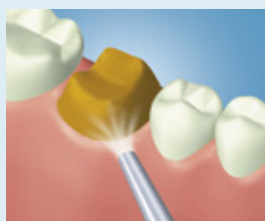
For Tooth



Mix liquids A and B.



Apply and leave for 20 sec.



Air-dry for 5 sec. and light-cure for 10 sec.



Light-cure* the margins and leave for 3 mins.

* Conventional halogen/LED: 20 sec. Plasma arc: 5 sec.

Ordering Information

	PRODUCT NAME/ITEM NUMBER	CONTENTS
	CLEARFIL ESTHETIC CEMENT EX Standard Kit #2901KA Universal #2903KA Clear #2904KA Opaque White	1 x Double-syringe for 1 shade (Universal, Clear, and Opaque White): Paste A, 4.6 g (2.3 ml)/Paste B, 4.4 g (2.3 ml); 1 x Try-in Paste for 1 shade, 2.4 g (1.8 ml); 1 x CLEARFIL DC Bond (Liquid A), 4 ml; 1 x CLEARFIL DC Bond (Liquid B), 4 ml; 1 x CLEARFIL Ceramic Primer, 4 ml; 1 x K-Etchant Gel, 6 ml; 1 x Alloy Primer, 5ml; 20 x Mixing tips; 1 x Light-blocking plate; 1 x Mixing dish; 50 x Disposable brush tips (White); 50 x Disposable brush tips (Black); 1 x Brush tip handle (White); 1 x Brush tip handle (Black)
	CLEARFIL ESTHETIC CEMENT EX Mini Kit #2911KA Universal #2913KA Clear #2914KA Opaque White	1 x Double-syringe for 1 shade (Universal, Clear, and Opaque White): Paste A, 2.4 g (1.2 ml)/Paste B, 2.3 g (1.2 ml); 1 x Try-in Paste for 1 shade, 2.4 g (1.8 ml); 1 x CLEARFIL DC Bond (Liquid A), 1 ml; 1 x CLEARFIL DC Bond (Liquid B), 1 ml; 1 x Ceramic Primer, 2 ml; 10 x Mixing tips; 1 x Light-blocking plate; 1 x Mixing dish; 50 x Disposable brush tips (White); 1 x Brush tip handle (White)
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Universal</p> </div> <div style="text-align: center;"> <p>Chroma</p> </div> <div style="text-align: center;"> <p>Clear</p> </div> <div style="text-align: center;"> <p>Opaque White</p> </div> </div>		<p>MINI KIT Specially created for CAD/CAM era.</p> <p>Refills</p> <p>Cement refills and Try-in pastes are available in four shades.</p>

Warranty: Kuraray Medical Inc. will replace any product that is proven to be defective. Neither Kuraray Medical Inc. nor the distributor accepts liability for any loss or damage, direct, consequential or special, arising out of the application or use of or the inability to use these products. Before using, the user should determine the suitability of the products for the intended use and the user assumes all risk and liability whatsoever in connection therein. Some data or information have been taken under the name of CLEARFIL™ ESTHETIC CEMENT EX in this document. "CLEARFIL™ ESTHETIC CEMENT EX" and Kuraray Medical Inc. products are available only through Kuraray authorized dealers. "CLEARFIL" and "CLEARFIL SE" are the trademarks of Kuraray Co. Ltd. © 2014 Kuraray America, Inc.