

CLEARFIL™ SE BOND



RESIN-BASED DENTAL ADHESIVE SYSTEM

The new generation self-etching bonding system

CLEARFIL SE BOND incorporates a new-generation version of the proven self-etching primer found in CLEARFIL LINER BOND series, plus a simple, rapid curing bond component. CLEARFIL SE BOND is a two-step, light-curing bonding system that significantly reduces procedural time, while still providing excellent strength and sealing performance for light-cured restorations. CLEARFIL SE BOND is suitable for the following restorative procedures:

- Direct filling restorations using light-curing composite or compomer
- Cavity sealing as a pretreatment for indirect restorations
- Treatment of hypersensitive and/or exposed root surfaces
- Intraoral repairs of fractured facing crowns made of porcelain, hybrid ceramics or composite resin using light-curing composite
- Surface treatment of prosthetic appliances made of porcelain, hybrid ceramics or cured composite resin



EASY
to USE

CLEARFIL SE BOND is composed of two, single-liquid components: self-etching PRIMER and light-cured BOND. No mixing is required before application. The self-etching PRIMER simultaneously etches and conditions dentin and cut enamel in one simple step. After applying the PRIMER and allowing it to sit briefly, the BOND is then applied and light-cured.



QUICK
to USE

CLEARFIL SE BOND is a true two-step bonding system, meaning no separate acid-etching step is performed^{*1}, and no time-consuming rinsing (and attention to surface moisture levels) is required. Both procedural steps are fast: the self-etching PRIMER is applied for 20 seconds, and the BOND light-cured for 10 seconds.

^{*1} Uncut enamel requires phosphoric acid etching.

PRIMER




- Apply PRIMER and leave for 20 seconds
- Do not rinse
- Dry with mild air flow

BOND




- Apply BOND and distribute evenly with mild air flow
- Light-cure for 10 seconds

RESTORATIVE




- Place composite or compomer restorative and light-cure

[CLEARFIL AP-X]

CONVENIENT
to USE

CLEARFIL SE BOND has a unique new Outer case that allows quick, single-handed delivery of both PRIMER and BOND. The Outer case is easy to store and also minimizes finger contact with the contents, which helps prevent possible skin irritation.



Outer case

Comparison of Procedural Steps

The following table shows the comparison of procedural steps with wet bonding systems.

	Self-etching primer system				Bond			
CLEARFIL SE BOND	Dispense, apply	20sec.	Dry	Apply, dry	Light-cure	10sec.		
	● Wet bonding system							
	Etching				Bond			
Single Bond	Dispense, apply	15sec.	Wash	Dry	Dispense, apply 2 times, dry	Light-cure	10sec.	
One Step	Dispense, apply	15sec.	Wash	Dry	Dispense, apply 2 times, dry	Light-cure	10sec.	Apply, dry
Prime&Bond NT	Dispense, apply	15sec.	Wash	Dry	Dispense, apply	20sec.	Dry	Light-cure 10sec.
Gluma One Bond	Dispense, apply	20sec.	Wash	Dry	Dispense, apply 2 times, dry	Light-cure	20sec.	
Syntac Single Component	Dispense, apply	15sec.	Wash	Dry	Dispense, apply	20sec.	Dry	Light-cure 20sec. Apply, dry Light-cure 20sec.

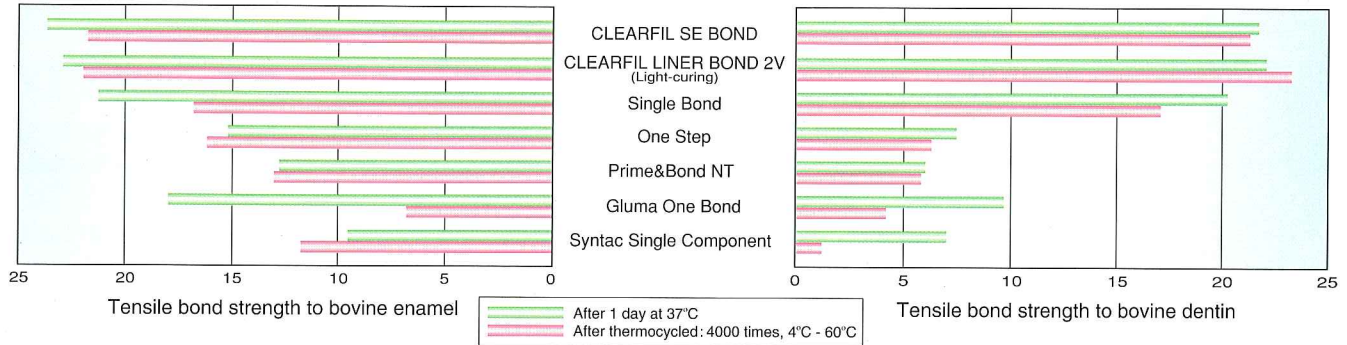
OPTIMIZED PHYSICAL PROPERTIES

CLEARFIL SE BOND PRIMER and BOND both contain the proven adhesive monomer MDP (10-Methacryloyloxydecyl dihydrogen phosphate), as used in the PANAVIA and CLEARFIL LINER BOND series. MDP provides high bond strength and long-term bond durability to enamel, dentin and base metals. The BOND component of CLEARFIL SE BOND contains approximately 10% of microfiller for added strength and stability.

Bond strength to Bovine Enamel and Dentin

CLEARFIL SE BOND produces extremely high and durable bond strength to both enamel and dentin.

● Tensile bond strength to bovine enamel and dentin (MPa)



Bond Strength to Human Uncut Enamel

The results of micro-tensile bond tests to uncut (unground) human enamel are shown here.

CLEARFIL SE BOND—without phosphoric acid etching—shows bond strength to uncut enamel equal to or exceeding that of a "wet bonding" system. This suggests that CLEARFIL SE BOND will perform well even if small sections of uncut enamel are present in a preparation.

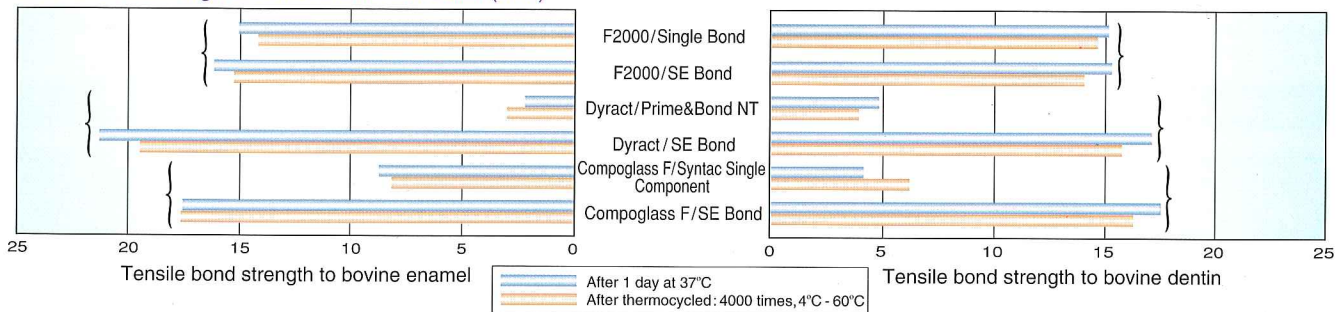
System	Unground
CLEARFIL SE BOND	17.9±5.4
CLEARFIL LINER BOND 2V	12.3±2.2
Single Bond	14.8±4.2

Data of Tsurumi University. Kida K *et. al.* (1999). Bond Strength of Resin Systems to Unground Enamel. J Dent Res 78:233 (Abstr 1017)

Bond Strength to Compomer Restoratives

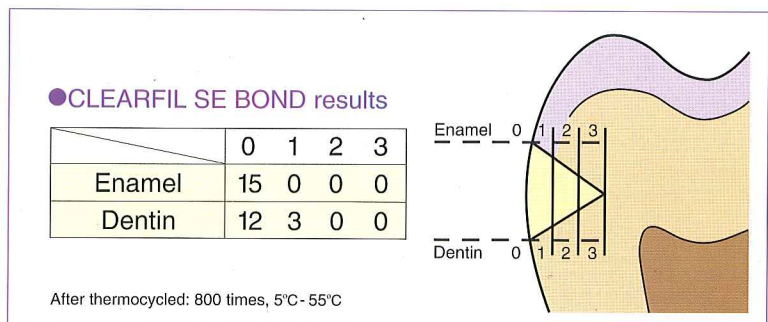
CLEARFIL SE BOND provides high bond strength to compomer restoratives as well as composite resin restoratives. In this test, the bond strength of compomer restoratives to enamel and dentin when bonded with CLEARFIL SE BOND exceeded those obtained when the restorative manufacturers' recommended bonding systems were used.

● Tensile bond strength to bovine enamel and dentin (MPa)



Marginal Sealing

Microleakage testing results of 15 human molars with V-shaped defects, restored using CLEARFIL SE BOND and thermocycled, are shown here. Note that microleakage could not be observed in any of the enamel interfaces, and that the dentin interfaces all showed zero or minimum microleakage. Exceptional marginal sealing performance of CLEARFIL SE BOND translates into long-term strength and excellent aesthetics with light-cure restorations.



Data of Creighton University. Latta MA *et. al.* (1999). Laboratory Evaluation of the KBN Adhesive System. J Dent Res 78:392 (Abstr 2293)

Light-curing bonding system

CLEARFIL™ SE BOND



Kit components:

- Primer (6 ml)
- Bond (5 ml)
- Outer case
- Disposable brush tips (50 pieces x 2)
- Brush tip handle
- Mixing plate
- Light-blocking plate

Indications:

- Direct filling restorations using light-curing composite or compomer
- Cavity sealing as a pretreatment for indirect restorations
- Treatment of hypersensitive and/or exposed root surfaces
- Intraoral repairs of fractured facing crowns made of porcelain, hybrid ceramics or composite resin using light-curing composite
- Surface treatment of prosthetic appliances made of porcelain, hybrid ceramics or cured composite resin

Versatile dual-cure bonding system

CLEARFIL™ LINER BOND 2V

CLEARFIL LINER BOND 2V is suitable for a wider range of applications thanks to its dual-cure capability (with the addition of BOND LIQUID B).



Indications:

- Light-curing composite restorations
- Chemical-curing composite restorations
- Hypersensitivity treatment
- Pretreatment cavity sealing for indirect restorations
- Bonded amalgam restorations
- Intraoral repair of fractured porcelain restorations using light-curing composite
- Cementing porcelain or composite inlays/onlays using resin cement
- Bonding to metal and porcelain when used with CLEARFIL PORCELAIN BOND ACTIVATOR and ALLOY PRIMER

Available Separately



Chemical-cure component
**CLEARFIL LINER BOND 2V
Bond Liquid B** (3ml)

Related products



Light-curing universal composite
CLEARFIL AP-X



Light-curing low viscosity composite
**CLEARFIL LINER BOND 2
PROTECT LINER F** (2ml)



Silane coupling agent
**CLEARFIL
PORCELAIN BOND
ACTIVATOR** (4ml)



Metal adhesion primer
ALLOY PRIMER
(5ml)

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