

G2-BOND Universal

2-Bottle Universal Bonding

Leading the way
to a new standard



Since 1921
100 years of Quality in Dental



Leading the way to a new standard

With over 1 billion composite restorations and a century of competence in dental materials, GC is leading the way to new standards in adhesive dentistry. With its proprietary **Dual H-Technology**, an advanced optimisation of the bonding both to the tooth and the composite, G2-BOND Universal is an **all-round universal 2-bottle system** combining what clinicians would expect from existing self-etch (SE) and etch-and-rinse (ER) Gold Standards, and even more:



- Your choice of preferred etching mode
- Superior durability and bond strength
- Superior resistance to marginal staining
- Superior dispensing and low technique sensitivity
- Multiple indications ¹

Evaluations by clinicians worldwide resulted in over 1,500 restorations performed with G2-BOND Universal. ²

The results indicate:

- Remarkable sealing effectiveness with virtually no post-op sensitivity ³
- 97% satisfaction in SE and ER etching modes
- 98% satisfaction with product handling and dispensing
- 89% satisfaction with the ergonomic bottle design



“The flexibility to bond in self-etch or etch-and-rinse mode, to seal and repair existing restorations is now applied to a 2-bottle adhesive.” ⁴

¹ Indications: Direct Composites | Intra-oral Repair | Immediate Dentin Sealing (IDS) | Treatment of hypersensitive teeth | Treatment of exposed root surfaces

| Luting of indirect restorations (with G-CEM LinkForce™) | Post luting & Core Build-up (with GRADIATM CORE & G-Premio BOND DCA).

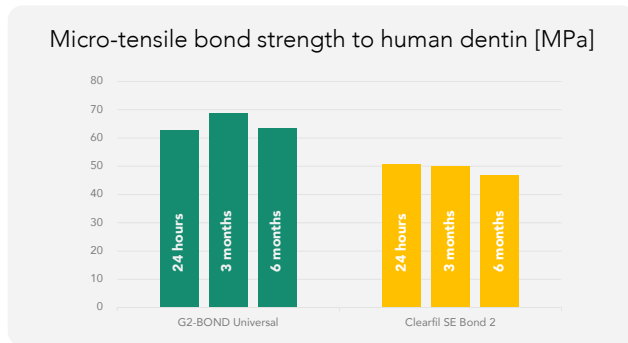
² Data on File.

³ Results confirmed by independent study from University of Siena, Italy.

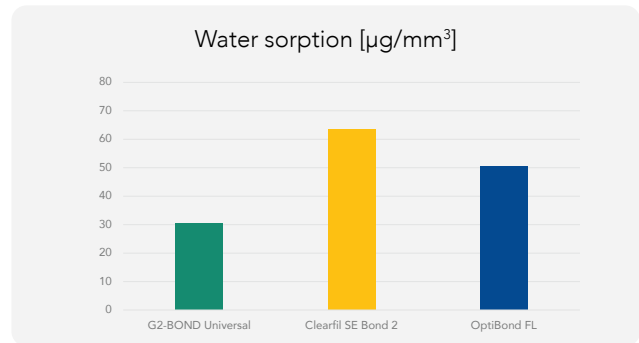
⁴ Prof Van Meerbeek, KU Leuven, Belgium.

Leading the way to...

...Superior durability & higher bond strength



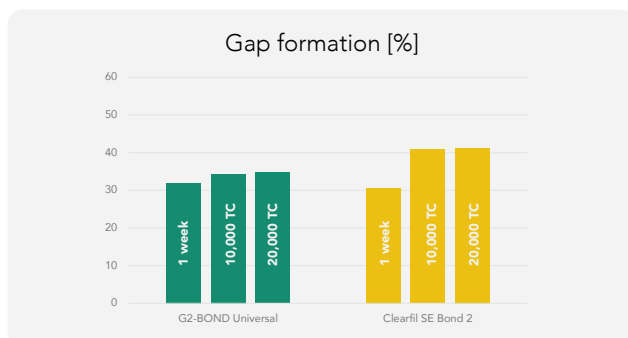
Source: Dr Mine, Osaka University, Japan



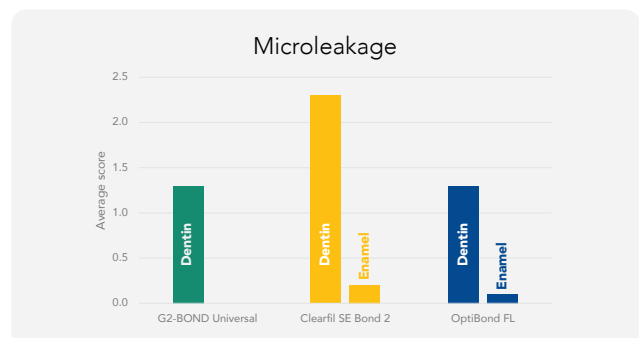
Source: Prof Van Meerbeek, KU Leuven, Belgium

G2-BOND Universal creates a **physically stronger, more durable** adhesive layer as the **Dual H-Technology** ensures a **higher bond strength immediately after placement**, with lower water sorption which **decreases the risk of degradation** for superior durability.

...Unmatched marginal quality



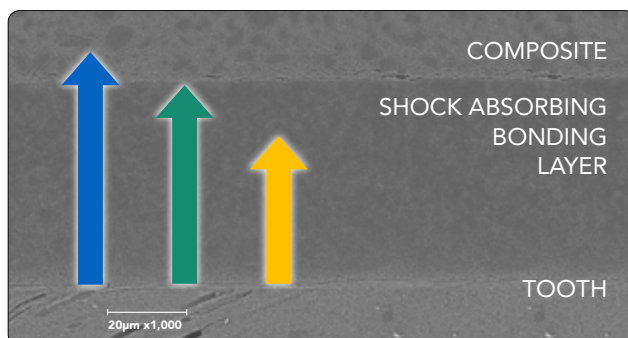
Source: Prof Tagami, Tokyo Medical and Dental University, Japan



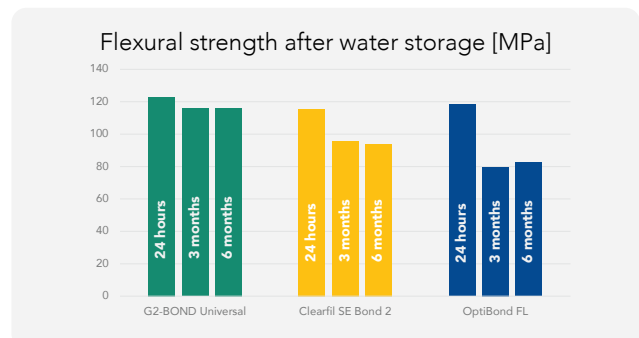
Source: Prof Ferrari, University of Siena, Italy

A strong bond layer that assists the aesthetic transition from the composite to the tooth, **avoid gap formation and microleakage** to maintain marginal quality over the time.

...Shock absorbing layer



Source: (SEM picture) Prof Miyazaki, Nihon University, Japan
(Film thickness) GC R&D, Japan, 2020, Data on File



Source: GC R&D, Japan, 2020, Data on File

The **optimal** thickness and **flexural strength** of G2-BOND Universal may act as a shock absorbing layer to **avoid debonding**. It functions **as a base** in large cavities and can overcome the polymerisation shrinkage, **compensating for the stress caused by the over layered composite**. Now clinicians can enjoy the benefits of a thick bonding layer in all etching modes.

Leading the way to...

...Superior clinical handling

IDS technique



Etching the tooth structure



Application of 1-PRIMER



Application of 2-BOND



After photopolymerisation, the sealed dentin is ready for digital impression.

Courtesy of
Dr Jean Meyer, France

Class II restoration



Selective enamel etching



Application of 1-PRIMER



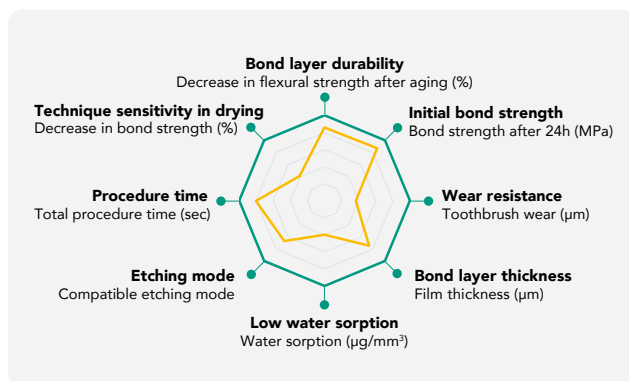
Application of 2-BOND



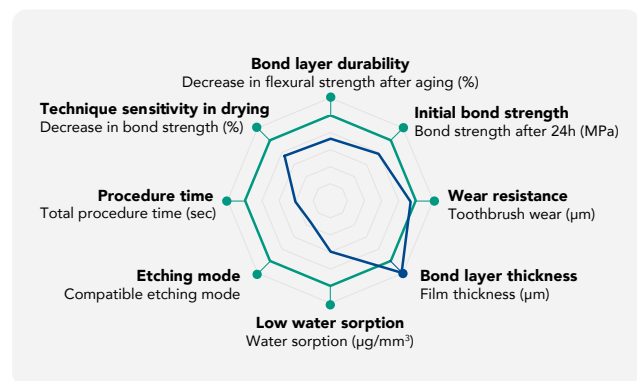
After photopolymerisation, the restorative material is applied.

Courtesy of
Dr David Gerdolle, Switzerland

...a new 2-bottle bonding standard in all etching modes



G2-BOND Universal **Clearfil SE Bond 2**



G2-BOND Universal **OptiBond FL**

GC R&D, Japan, 2020, Data on File

The spider graphs above show the all-round performance of G2-BOND Universal that leads the way to:

- Long-lasting restoration
- Virtually no post-operative sensitivity and aesthetic bonding layer
- Superior handling and dispensing

For an all-round satisfaction and comfort of your patients!



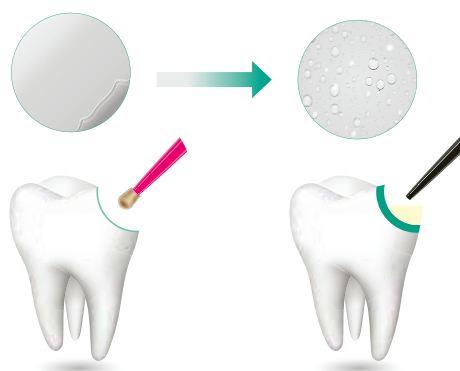
G2-BOND Universal Dual H-Technology

Challenged to **improve on existing 2-bottle benchmarks**, GC researchers focused on strengthening the adhesive layer and significantly reducing the potential for water degradation over time. The new GC proprietary **Dual H-Technology provides a smooth transition from hydrophilic to hydrophobic characteristics** in the primed surface, which is then **further strengthened by a truly hydrophobic protective bond layer**.¹

Hydrophilic primer wets and self-etches the tooth surface effectively.

Without hydrophilicity?

- Insufficient resin infiltration to dentin surface
- Higher risk for gap formation



Highly hydrophobic bond layer results in strong bonding to composite.

Without hydrophobicity?

- Hydrolytic degradation of bond layer
- Increased risk for debonding

All-round performance of a unique composition

- 4-MET for a reliable adhesion to enamel & dentin
- MDP for an excellent adhesion to enamel & dentin, zirconia, alumina and non-precious metals
- MDTP to bond to precious metals
- HEMA-free bonding system for a clinically proven outstanding durability²

G2-BOND Universal (0% HEMA)

Clearfil SE BOND 2 (10-30% HEMA)

Optibond FL (20-40% HEMA)

Modern, intelligent and ergonomic design

G2-BOND Universal is instantly recognisable by its unique bottle covers

1-PRIMER

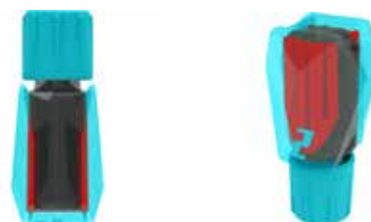
- Bottle cover designed for low viscosity & volatile content to ensure controlled dispensing
- Prevent dripping and eliminate waste of liquid through ingenious cover design
- 300 applications per bottle
- Reusability with any new bottles



Reduced contact point between cover and bottle

2-BOND

- Designed for high viscosity liquids to reduce dispensing force
- Prevent dripping and eliminate waste of liquid through ingenious cover design
- 300 applications per bottle
- Reusability with any new bottles



Rib designed to effectively press the bottle

¹ GC R&D Date, Japan, 2020, Data on File.

² Van Dijken J, et al, Dent Mater. (2013).

G2-BOND Universal

Ordering information



Order no.	Description	Content
10006819	G2-BOND Universal Bottle Kit	1x 1-PRIMER 5mL 1x 2-BOND 5mL accessoires
10006821	G2-BOND Universal 1-PRIMER Refill 5ml	1x Refill 5mL
10006822	G2-BOND Universal 2-BOND Refill	1 x Refill bottle 5mL

Related products



G-aenial A'CHORD™
Advanced universal composite



everX Flow™
Short-fibre reinforced flowable composite

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