

Leading the way to a new standard

G2-BOND Universal

The new standard of 2-bottle Universal Bonding





Since 1921 Towards Century of Health

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 durability ²

G2-BOND Universal (0% HEMA)

Product A (10-30% HEMA)

Product B (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

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



Reduced contact point between cover and bottle





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).

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 strength¹
- Superior resistance to marginal staining¹
- Superior dispensing and low technique sensitivity
- Multiple indications²

Evaluations by clinicians worldwide resulted in over 1,500 restorations performed with G2-BOND Universal.³ The results indicate:

- Remarkable sealing effectiveness with virtually no post-op sensitivity⁴
- 97% satisfaction in SE and ER etching modes
- 98% satisfaction with product handling and dispensing
- 89% satisfaction with the ergonomic bottle design



3 GC Data on File.

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

¹ GC R&D, Japan, 2020, Data on File.

Indications: Direct Composites I Intra-oral Repair I Immediate Dentin Sealing (IDS) I Treatment of hypersensitive teeth I Treatment of exposed root surfaces I Luting of indirect restorations (with G-CEM LinkForceTM) I Post luting & Core Build-up (with GRADIATM CORE & G-Premio BOND DCA).
GC Data on File

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



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









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

Class II restoration



Selective enamel etching



Application of 1-PRIMER

Application of 1-PRIMER



Application of 2-BOND



Application of 2-BOND



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



After photopolymerisation, the restorative material is applied.

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



G2-BOND Universal Product A

G2-BOND Universal Product B

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!



GC R&D

Courtesy of Dr David Gerdolle, Switzerland

Order no. GC-013647	Description G2-BOND Universal Bottle Kit	Content 1x 1-PRIMER 5mL 1x 2-BOND 5mL accessoires	
GC-013653	G2-BOND Universal 1-PRIMER Refill 5ml	1x Refill 5mL	
GC-013654	G2-BOND Universal 2-BOND Refill	1 x Refill bottle 5mL	

Related products



G-ænial A'CHORD™ Advanced universal composite



Essentia™ Syringe Universal 1x 2mL syringe



G-ænial Anterior and Posterior



Gradia Direct X



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