



# Fuji<sup>®</sup> BULK

**Robust. Rapid. Remarkable.**

***./GC./***

# Fuji® BULK – a truly remarkable GIC

Fuji® BULK is a **robust, rapid-setting, multipurpose** auto-cure glass ionomer cement (GIC) designed to meet the challenge of bulk placed restorations in **more acidic oral environments**. Truly remarkable in its formulation, **Fuji® BULK** provides a unique balance between restoring function and protecting tooth surfaces from acid challenges.

## A truly robust multipurpose GIC

Fuji® BULK is a perfect choice for:

- Paediatrics
- Geriatrics
- Special needs
- Dry mouth patients
- Transitional restorations
- Caries-active patients
- Patients with erosion
- Exposed root surfaces

## The fastest setting auto-cure GIC

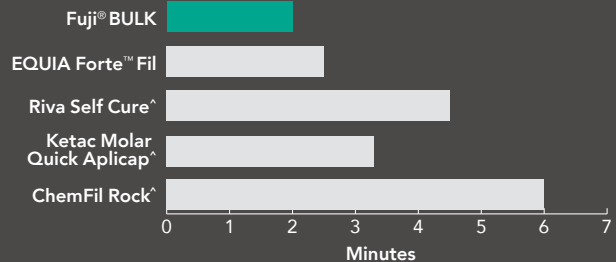
Fuji® BULK gives you the freedom to move faster without compromising the working time, cavity adaptation, adhesion and handling. Fuji® BULK quickly seals and restores and is ready for final finishing just 2 minutes after start of mix.

Fuji® BULK is available in a universal shade and is indicated for any restoration where **speed, acid resistance** and **bulk cure** are priorities over aesthetics.



Fuji® BULK was used to restore an exposed root surface in a polypharmacy elderly patient with a dry mouth.

### Final set time (moisture critical time)



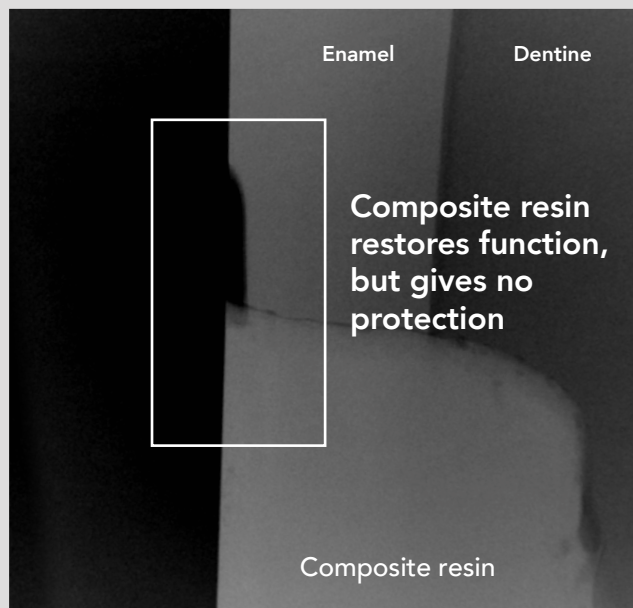
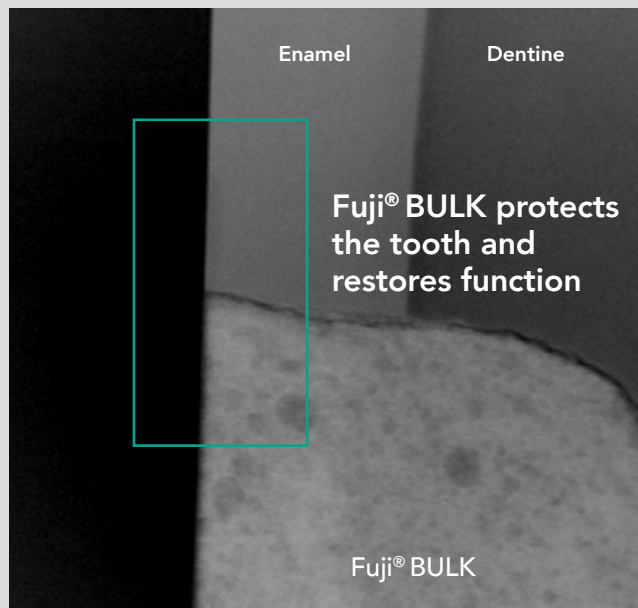
R&D Dept. GC Corporation  
^Not trademarks of GC

## Fuji® BULK strengthens and protects surrounding tooth structures

Fuji® BULK was designed with hostile oral environments in mind, recognising the growing need for a bulk-cure, self-adhesive restorative that could **provide a balance between restoring function and protecting surrounding and adjacent tooth surfaces.**

Fuji® BULK could be your first choice as a base in the sandwich technique, is perfectly suited to geriatric and paediatric restorations, and its speed of set makes it ideal for emergency, transitional or stabilisation procedures.

### pH 4.0 lactic acid challenge\*



\*24 hr acid erosion test (0.1M lactic acid buffer (pH 4.0)) GC R&D

# Fuji® BULK- For challenging oral environments

## When moisture control is compromised

Fuji® BULK's rapid set and short moisture critical time (2 minutes), reduces the risk of moisture contamination during formation of the gic matrix. This is important in clinical situations where moisture control is compromised yet a high quality and robust gic restoration is needed (e.g. paediatrics, geriatrics and special needs patients).

## Choosing glass ionomer cement

In many clinical situations, choosing to restore with a glass ionomer cement is the best option from the tooth's perspective. GC's restorative glass ionomer cements are developed to be moisture-friendly and exceptionally durable, ensuring the formation of a strong, chemically fused seal to dentine and enamel.



1 Exposed root surface



2 Clean and condition for 10 sec. with CAVITY CONDITIONER, rinse and gently dry.



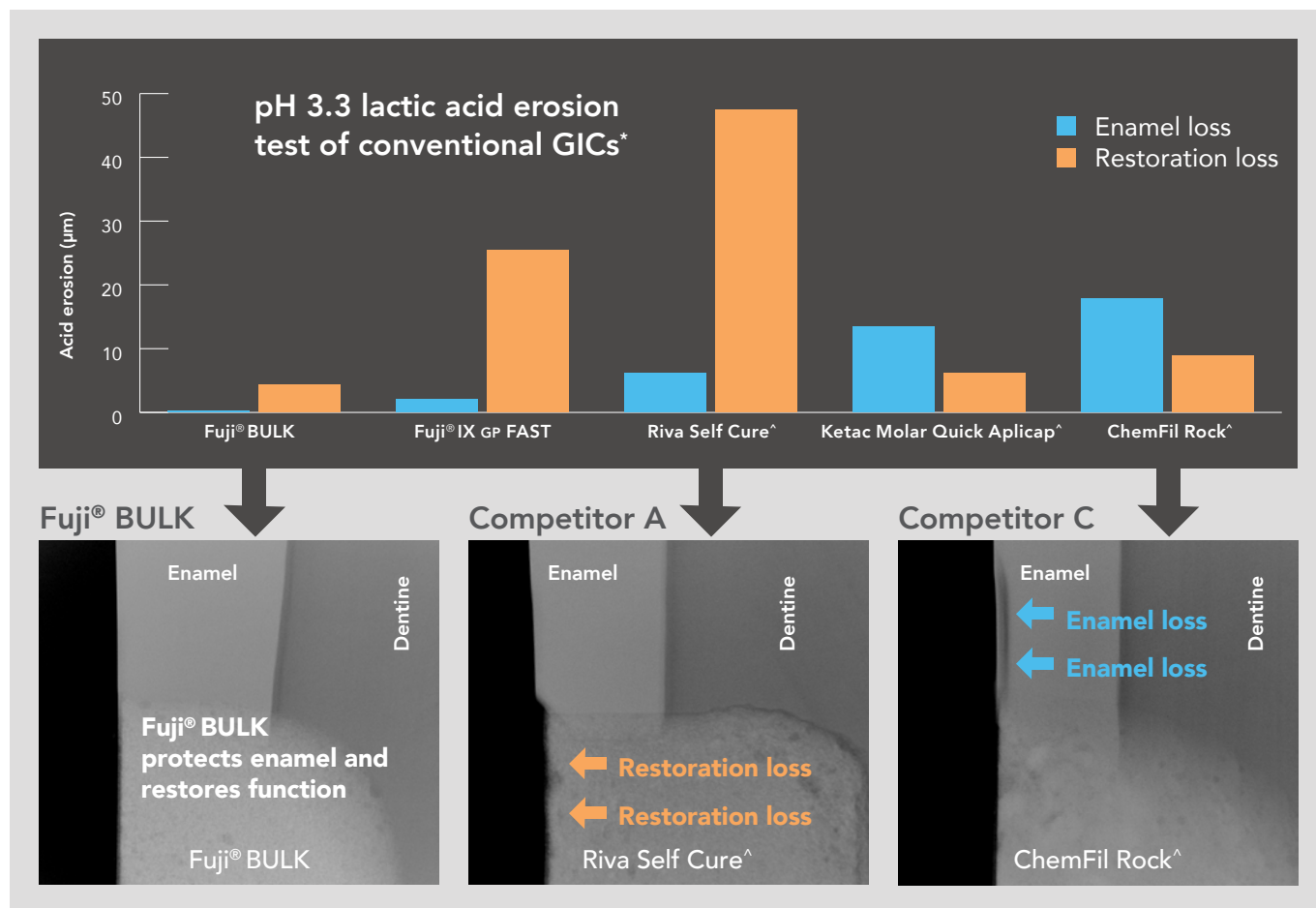
3 After 10 sec. mixing, apply Fuji® BULK direct to the cavity.



4 Fuji® BULK is finished with high speed under water spray 2 min. after start of mix.

# The most acid-resistant conventional GIC

The biggest challenge for a glass ionomer cement is being able to protect surrounding and adjacent tooth structures, while being robust enough to maintain its own form and function in acidic environments. Due to its remarkable formulation, **Fuji® BULK does this better than any other conventional GIC.**



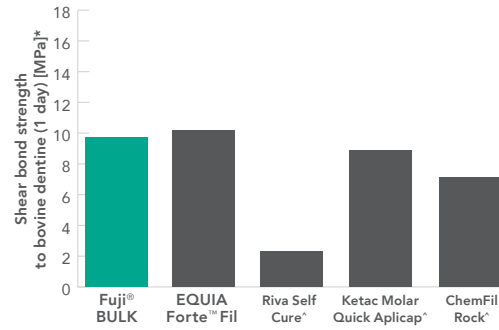
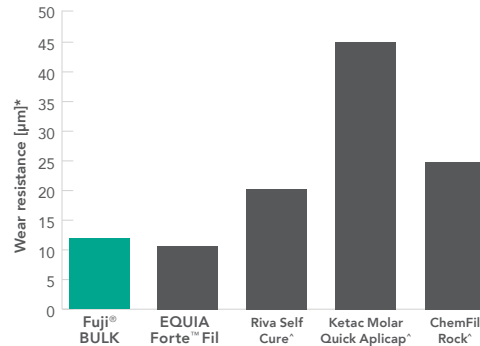
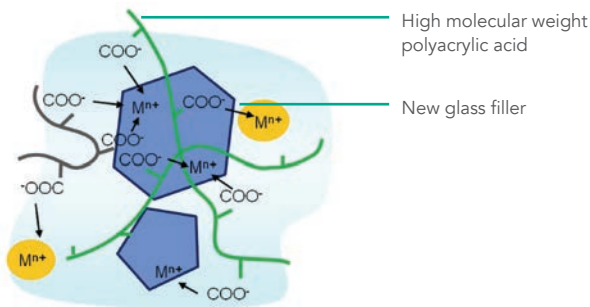
\*24 hr acid erosion test (0.1M lactic acid buffer (pH3.3)) GC R&D

^Not trademarks of GC

# Fuji<sup>®</sup> BULK, a ROBUST glass ionomer restorative cement

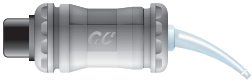
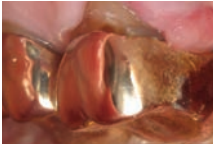
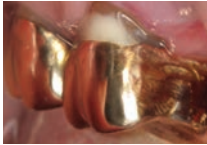
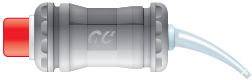



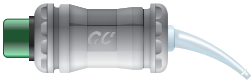

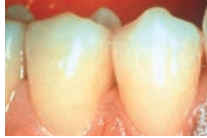
## Chemistry and physical properties

The development of a purpose-designed glass filler and a new higher molecular weight polyacrylic acid enabled GC to deliver the increased acid resistance and rapid setting characteristics of Fuji<sup>®</sup> BULK. It also gives excellent wear resistance, and impressive physical properties.



\* R&D Dept. GC Corporation  
<sup>^</sup>Not trademarks of GC

## GC glass ionomer restoratives usage guide

Product	Features	Primary indication	
<b>Fuji® BULK</b> Conventional auto-cure GIC 	<ul style="list-style-type: none"> <li>• Rapid set</li> <li>• Acid resistance</li> <li>• Radiopacity</li> <li>• 1 shade</li> </ul>	Any restoration where speed, acid resistance and bulk cure are priorities over aesthetics.	  Dr G Millich, NZ
<b>EQUIA Forte™ Fil &amp; Coat</b> Conventional auto-cure GIC & LC Coat  	<ul style="list-style-type: none"> <li>• Strength</li> <li>• Aesthetics</li> <li>• Wear resistance</li> <li>• 3 shades</li> </ul>	Proven system for occlusal restorations*	  Dr G Millich, NZ
<b>Fuji® II LC/Gold Label II LC Capsule</b> Resin reinforced dual-cure GIC 	<ul style="list-style-type: none"> <li>• Aesthetics</li> <li>• Light-cure</li> <li>• Strong adhesion</li> <li>• 11 shades</li> </ul>	Class V restorations	  Dr S Saito, Japan

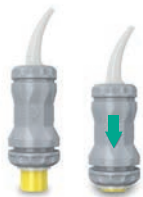
This is a guide only. Material selection is defined by patients' characteristics, GIC's physical properties and clinicians' handling preferences. GC's endless pursuit for the ultimate in quality ensures you are selecting products for your patients that have the highest levels of quality, reliability and performance.

\*Gurgan S, Kutuk ZB, Firat E, Cakir Y, Oktas SS. 60-Month Clinical Performance Of A Glass-Ionomer Restorative System. J Dent Res 2014; 93 (Spec Issue B): 89.

## GC Capsule Activation Guide



1. Shake or tap to loosen powder



2. Depress plunger and hold down firmly for 2 sec.



3. Mix for 10 sec.



4. Click twice to prime the capsule, then dispense slowly



Product	Fuji® BULK	EQUIA Forte™ Fil	Riva Self Cure <sup>^</sup>	Ketac Molar Quick Aplicap <sup>^</sup>	ChemFil Rock <sup>^</sup>
Mixing time (from IFU)	10"	10"	10"	10"	15"
Moisture critical time (from IFU)	2'00"	2'30"	4'30"	3'30"	6'00"
Compressive Strength [MPa] <sup>*</sup>	215±20	219±16	141±15	200±28	176.3±5
Flexural Strength [MPa] <sup>*</sup>	44±5.8	43±4.0	32±2.0	44 ±4.5	50±28
Flexural Energy [MPa] <sup>*</sup>	0.06	0.06	0.04	0.05	0.12
Wear resistance [µm] <sup>**</sup>	27±3.8	20±5.4	21±4.9	27±4.1	44±8.5
- with EQUIA Forte Coat	12±7.6	11±5.3			
Radiopacity [mm] <sup>°</sup>	3.3	2.2	2.5	3.0	2.7
Shear Bond strength [MPa] <sup>#</sup>					
- Bovine enamel (1 day)	9.0±0.7	10.3±0.3	6.8±0.9	10.4±2.2	9.9±3.0
- Bovine dentine (1 day)	9.7±0.7	10.2±0.5	2.3±1.3	8.9±1.7	7.1±0.3

\*Test method based on ISO9917-1: 2007 \*\*in house test, bovine enamel, 20,000 cycles. ° Equivalent aluminium thickness. #Ultradent Method. GC R&D  
<sup>^</sup>Not trademarks of GC



### Fuji® BULK

Box: 50 capsules  
 Shade: Universal



Since 1921  
 Towards Century of Health

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