



## G-CEM™ CAPSULE

SELF ADHESIVE LUTING CEMENT IN CAPSULES

For use only by a dental professional in the recommended indications.

### RECOMMENDED INDICATIONS

- 1. Cementation of all types of all ceramic, resin and metal-based inlays, onlays, crowns and bridges (max. 2 abutments).
- 2. Cementation of metal, ceramic, fiber posts, and cast post and cores.

### CONTRAINDICATIONS

- 1. Avoid use of this product in patients with known allergies to glass ionomer cement, methacrylate monomer or methacrylate polymer.

### DIRECTIONS FOR USE

Powder / Liquid Ratio (g/g)	0.35 / 0.15
Mixing Time (sec.)	10*
Working Time (23°C/73°F) (min., sec.)	2'30"

### ACEMTATION TECHNIQUE FOR ceramics, indirect composites and metal

#### 1. TOOL PREPARATION

- a) Prepare tooth in usual manner. For pulp capping, use calcium hydroxide.
- b) Rinse thoroughly with water. Dry by gently blowing with oil free air.
- c) Dry the tooth with a hand towel.

NOTE:

- 1. Do not use substances like H<sub>2</sub>O<sub>2</sub> (hydrogen peroxide) and/or disinfectants as these may lower the bond strength.

Special care should also be taken to remove so called imaging powders very thoroughly with pumice and water.

#### 2. RESTORATION

Make sure that the restoration is pretreated and handled according to the manufacturer's instructions.

#### 3. POLYMERISATION AND MIXING

- a) Before activation, shake the capsule or tap it side on a hard surface to loosen the powder (Fig. 1).

- b) To activate the capsule, push the plunger until it is fully depressed with the mixer (Fig. 2). Mix for 2 seconds (Fig. 2).

- c) Ensure the capsule is fully pressed to avoid the incorrect mixing ratio of powder and liquid.

- d) The capsule should be activated just before mixing and used immediately.

- e) Immediately set it into a mixer (or an amalgamator) and mix for 10 seconds (Fig. 3). More details on mixing times can be found in following chart.

Mixing time chart

Mixer Speed	Mixing Time
Standard mixer (approx. 4,000rpm)	10 seconds
High-speed mixer (over 4,500rpm)	*No centrifuge option

Note: Refer to the respective manufacturer's instructions for use.

#### 4. DISPENSING

- a) Immediately remove the mixed capsule from the mixer and load it into the GC CAPSULE APPLIERS.

- b) Make a click with the capsule (Fig. 4). To adjust the direction of the nozzle, hold the applier with the capsule towards you and turn the capsule body.

c) Extract directly into the restoration (Fig. 5).

Ambient light may shorten the working time. It is recommended to diminish the intensity or turn off your operation light during the cementation procedure.

- d) To remove the used capsule, push the applier release button. Twist the capsule and pull upwards.

- e) Coat the internal surface of the restoration with sufficient cement and seat immediately. The working time is 2 minutes 30 seconds from start of mixing of the capsule. Higher temperatures will shorten the working time. G-CEM CAPSULE is recommended to extend the working time.

f) Maintain moderate pressure.

- g) To remove excess cement, light cure using a visible light curing unit (Halogen / LED) for 2-4 seconds (Fig. 6) or use the self-cure (G-CEM CAPSULE) or the self-cure (GC CAPSULE APPLIERS).

- h) Remove excess cement with a scalpel (Fig. 7).

- i) Light cure each surface for 10 seconds (single surface from occlusal: 10 seconds, any other surfaces: 10 seconds each) or allow the cement to self cure for 4 minutes after seating of the restoration.

NOTE: G-CEM CAPSULE is a dual cure cement. To insure proper curing involving cementation procedures, G-CEM CAPSULE must be used in self cure mode for 4 minutes.

j) Metal, metal coping restorations - Metal, metal coping restorations - Translucent metal-free restorations greater than 2 mm in thickness

Finish and polish margins with appropriate instruments.

### B. CEMENTATION TECHNIQUE for metal, fiberglass and ceramic posts

#### 1. TOOTH PREPARATION

- a) In case of tooth fracture, clean according to manufacturer's instructions. The post space should be cleaned, rinsed and dried thoroughly using paper points. The post space should be dry.

b) Sodium hypochlorite solution is recommended to use for the chemical cleaning of the post space.

c) Do not use H<sub>2</sub>O<sub>2</sub> (hydrogen peroxide) to chemically clean the post space as this may damage the bonding strength.

#### 2. POST PREPARATION

Make sure that the post is pretreated and handled according to the manufacturer's instructions.

#### 3. CAPTURE ACTIVATION AND MIXING

Refer to A.3.

#### 4. DENTIN & CEMENTATION

NOTE:

- a) Refrigerate the G-CEM CAPSULE to extend working time.

- b) Immediately remove the mixed capsule from the mixer and attach a GC CAPSULE Elongation Tip on the capsule nozzle firmly until it clicks. GC CAPSULE Elongation Tip can only be attached to G-CEM CAPSULE with a retaining screw (Fig. 8). Do not use the GC CAPSULE APPLIERS. Immediately prime the capsule with the elongation tip into a GC CAPSULE APPLIERS.

- c) Make a click to prime the capsule (Fig. 4). To adjust the direction of the nozzle, hold the applier with the capsule towards you and turn the capsule body.

- d) Place the tip deep in the post space and start extending the cement with 45 seconds of rotation. Keep the tip immersed in the cement whilst dispensing to avoid trapping air bubbles.

NOTE:

- e) Ambient light may shorten the working time. It is recommended to diminish the intensity or turn off your operation light during the cementation procedure.

- f) Remove the used capsule, push the applier release button. Twist the capsule and pull upwards.

- g) Continue to maintain moderate pressure while removing excess cement with appropriate instruments.

- h) Light cure all surfaces for 20 seconds or allow the cement to self cure for 4 minutes after seating of the post (Fig. 10).

### STORAGE

Recommended for optimal performance, store the capsules in the original aluminum foil in a cool and dark place (4-25°C) (39-77°F).

### SHADES

A (dark shade), AO3 (opaque), BO1 (opaque) and Translucent Vito is a registered trademark of Vita Zahnfabrik, Bad Säckingen, Germany.

### PACKAGE

- 1. Single shade package: 50 capsules

- 2. Assortment package: 50 capsules (20 each of A2 and Translucent, 5 each of AO3 and BO1)

Average contents per capsule: 0.35 g powder and 0.15 g (0.14 mL) liquid cement. Total weight of the capsule: 0.50 g cement per capsule 0.17 mL.

### 3. GC CAPSULE APPLIERS

- 1. GC Capsule Applier I: 1 piece

### 4. GC Capsule Elongation Tip (without extension): 50 pieces

#### VORSICHT

1. Ein Stift oder Hinterlasterkopf sollte mit einem abgeriegelten Tupfer befeuchtet und mit Wasser geputzt. Flüssig mit Wasser spülen. Zur Vermeidung von Gewebedefekten kann ein Koffeler getragen, oder mit COCOA BUTTER abgetrocknet werden.

2. Bei Augenkontakt sofort mit viel Wasser spülen und einen Facharzt aufsuchen.

3. Wenn Sie die Kontaktlinse aus dem Auge entfernen, waschen Sie das Gerät mit Wasser ab.

4. Nicht mit einem abgeriegelten Tupfer auf eine Wundfläche oder einen Geschwür ansetzen.

5. Während des Lichtstrahls einer angemessenen Lichtschutz verwenden.

6. Dieses Produkt ist nicht für Füllungen oder Aufbauteile bestimmt.

7. Wenn Sie die Elongationstipps mit einem abgeriegelten Tupfer ansetzen, achten Sie darauf, dass der Alkohol nicht in den Weltausbach absieht, sondern die Spitze auf den Elongationstipps ansetzt.

8. In rare cases the product may cause sensitivity in some people. If any such reaction occurs, discontinue the use of the product and refer to a physician.

9. Personal protective equipment (PPE) such as gloves, face masks and safety glasses should always be worn.

Some products referenced in the present IFU may be classified as hazardous according to GHS. Always familiarize yourself with the safety data sheets available at: <http://www.gceurope.com>.

They can also be obtained from your supplier.

Undesired effects - Reporting: If you believe to have had any kind of undesired effect, reaction or similar events experienced by use of this product, including those not listed in this instruction for use, please report them directly through the relevant vigilance system, by selecting the appropriate authority for medical devices/contacts, [http://www.gceurope.com/medical-devices/contacts\\_en](http://www.gceurope.com/medical-devices/contacts_en) as well as to our internal vigilance system: [vigilance@gc.dental](mailto:vigilance@gc.dental). In this way you will contribute to improve the safety of this product.

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Rx Only

### MANUFACTURED BY

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Habifit® is a registered trademark in Canada.

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For use only, carefully read the instructions for use.

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## G-CEM™ CAPSULE

SELBSTHAFTENDER BEFESTIGUNGSEZIMENT IN KAPSELFORM

Nur zur Verwendung durch zahnmedizinisches Fachpersonal für die angegebene Indikationen.

### INDIKATIONEN

- 1. Befestigung aller metall-, keramik- oder kunststoffbasierten Inlays, Onlays, und Brücken (max. 2 Abutments).

2. Zementierung von Metall-, Keramik-, Glasfaserstäben, und gegossenen Stiften und Stiftaufbauten.

### KONTRAINDIKATIONEN

1. Pulpenabdeckung

2. Vermeiden Sie die Verwendung dieses Produkts bei Patienten mit bekannten Allergien gegen G-CEM CAPSULE, Glasionomer-Zementen, Methacrylat-Polymer und Methacrylat-Polymer.

### VERWENDUNG

Pulver : Flüssigkeitsverhältnis(g/g)

Arbeitszeit (Sek.)

Verarbeitungszeit (23°C/73°F)

(Min., Sek.)

Temperatur (23°C/73°F)

(min., sec.)

Temperatur (23°C/73°F)

(max., sec.)

