

## Carbomer and fluorapatite enhanced glass ionomer crown cement in capsules

**GCP GLASS CROWN CEMENT** is a new carbomised nano particles containing glass ionomer cement with specially designed filler and fluorapatite/ hydroxyapatite particles. **GCP GLASS CROWN CEMENT** is designed for cementing of crowns where a natural fusion bonding is established with the pre-treated zirconia (ZrO<sub>2</sub>) with fast setting time. **GCP GLASS CROWN CEMENT** is completely biocompatible during its entire operating cycle of production, processing and loss of products during the wear process. It has excellent chemical bonding to dentin and enamel, ensuring a tight seal at the dentinal margins. Remineralisation is accelerated by nanotechnology fluorapatite particles. **GCP GLASS CROWN CEMENT** does not contain any resin, solvents and metals and is as such monomer free. Etching of enamel and dentin is contraindicated. **GCP GLASS CROWN CEMENT** is radiopaque for easy postoperative diagnosis.

**GCP GLASS CROWN CEMENT** capsules are easily activated by hand and the content of the capsule is easily extruded with a capsule gun. Capsule mixing is achieved by a high frequency capsule mixer with about 4,300 oscillations/ min. Application of the mixed cement can be done directly on the prepared surface.

The information for use of a product has to be kept for the duration of application.

## DIRECTIONS FOR USE

### 1. Tooth preparation

Clean the tooth surface with water, cleaning with EDTA is allowed but not necessary. Rinse thoroughly and dry, but **do not** desiccate. Direct pulpa capping with **GCP GLASS CROWN CEMENT** is **contraindicated**. To deep areas or possible pulpa exposure apply appropriate hard setting liner.

### 2. Activation and Mixing

Before activation shake the capsule or tap its side on a hard surface to loosen the powder. For activation push the plunger on a plane surface to the end of the capsule. Insert the capsule into a universal capsule gun and click once to standardize. Insert the capsule into a mixer and mix the capsule for **10-15 seconds with high frequency mixers**. **Remove the pin from the nozzle after mixing**. Insert the capsule into the capsule gun and pull the lever 2 times (2 clicks) to prime. Extrude the **GCP GLASS CROWN CEMENT** directly onto the prepared surface. The capsule activation, mixing and cement dispensing should be carried out in sequence without pausing. Within **15 seconds** maximum after mixing, start to extrude the mixture directly into the restoration.

**Immediately tightly close the aluminium bag after taking out capsule(s).**

### 3. Cementing

Extrude the mixed **GCP GLASS CROWN CEMENT** out of the capsule directly onto the prepared bonding surface of the restoration and put the crown in place immediately within the **working time 1:15 minutes (at 23 °C or 74°F)**. Remove excess cement at the first setting stage.

Maintain isolation until the set of the cement is verified (approx: 3:30 min).

The setting time of **GCP GLASS CROWN CEMENT** is 3:30 minutes under clinical circumstances.

**Important: Higher temperatures during setting will shorten the setting time, lower temperatures will prolong the working time. The best results for setting are achieved with a light cure device that has an output of 1400 mw/cm<sup>2</sup> for 60-90 seconds (max. 60°C or 140°F).**

**An overextended working time will cause the loss of adhesion to the dental enamel and the dentin.**

### 4. Conclusive Notes

This product is only to be applied by a dental professional in the manner as described in these instructions.

Do not use **GCP GLASS CROWN CEMENT** on patients who are allergic to the material. In case of allergic reactions, immediately stop the application and advise the patient to consult a doctor. An operator, who has a history of allergy to glass-ionomer cements, should not handle **GCP GLASS CROWN CEMENT**.

Do not allow the cement mixture to contact the oral tissues or skin. In case of contact, remove the material with absorbent cotton soaked in alcohol and rinse with water.

Avoid eye contact of the cement mixture. In case of contact, immediately flush with water and seek medical treatment.

Do not use any powder or liquid to adjust the viscosity of the mixed cement.

### 5. Storage

Store **GCP GLASS CROWN CEMENT** in the original aluminium bag in a cool place at 4-25 °C (39-78 °F). The temperature should not exceed 25 °C (78 °F). Do not use after expiry date. The shelf life is 2 years.

### 6. Technical information (at 23°C)

**Capsule mixing time: 10-15 sec with high frequency mixers**

**Time of initial extrusion after mixing: max 15 sec.**

**Working time (including mixing-extruding time): 1:15 min**

**Net setting time: 3:30 min**

### 7. Patent information

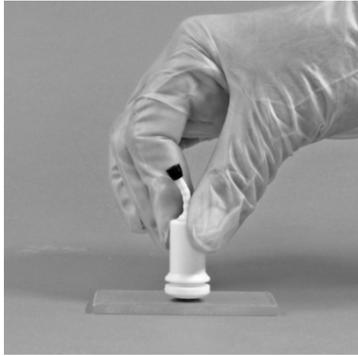
**GCP GLASS CROWN CEMENT** (and its method) are patented for dental use and are optimised for command setting when heat is applied.

Containing product is produced under license of GCP Dental BV by First Scientific Dental GmbH, Elmshorn Germany

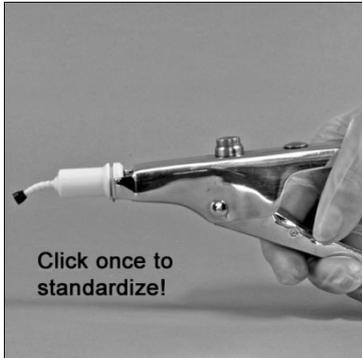
CE 0482

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## Instruction for activating and mixing GCP CAPSULE



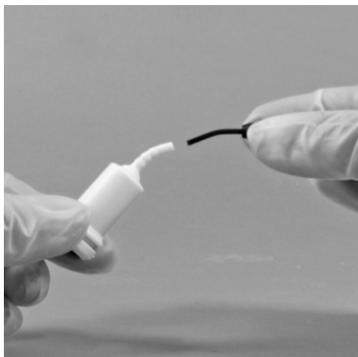
Before activation shake the GCP CAPSULE to loosen the powder.  
For activation press the plunger on a plane surface to the end into the capsule.



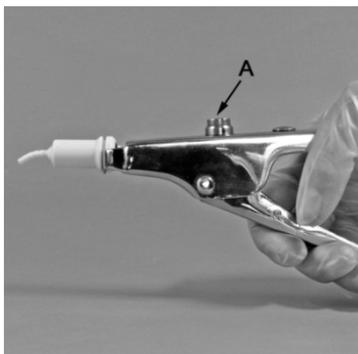
Insert the GCP CAPSULE into the universal capsule gun and **click once** to standardize.



Insert the GCP CAPSULE into a mixer (or an amalgamator), close lid and mix immediately for 10-15 seconds (about 4300 oscillations / min).



Remove the pin from the nozzle after mixing.



Insert the GCP CAPSULE into the capsule gun. Pull the lever 2 times (2 clicks) to prime the GCP CAPSULE. Extrude the content directly in to the prepared surface. Unlock the gun and remove the capsule.