Benco Dental™ Resin Modified Glass Ionomer Cement Capsules

Instructions for Use

Light Cure Resin Modified Glass Ionomer Luting Cement in Capsules

MD

Product description
A light cured resin reinforced glass ionomer luting cement. In addition to its excellent fluoride release and biocompatibility as a glass ionomer cement, it provides strong chemical bonding to dentin, enamel, and the restoration, ensuring a tight seal at the dentinal margins.. Because of its radiopacity it ensures easy postoperative diagnosis. It meets the requirements of ISO 9917-2.

Capsules are easily activated and the content of the capsule is easily ejected out with the applicator gun. Capsule mixing (mixing time 10 sec) is achieved by a high frequency mixer with about 4,300 oscillations/min. Application can be done directly from the capsule.

Indications/Intended use
Cementing of crowns, bridges, inlays and onlays (all types: metal, resin, ceramic fused to metal and ceramic)

Performance features
The performance features of the product meet the requirements of the intended use.

Contraindications
- In singular cases, the material may cause a sensitizing reaction in patients with hypersensitivity to any of the ingredients. In these cases, the material should not be used further on.
- Direct and indirect pulp capping

Patient target group
Persons who are treated during a dental procedure.

Intended users
This medical device should only be used by a professionally trained dental practitioner.

Interaction with other materials
Avoid direct contact with products containing eugenol since eugenol impairs the setting.

Application

1. Tooth Preparation
Prepare tooth in usual manner.

For pulp protection areas close to the pulp should be covered with a thin layer of pulp capping material or MTA cement.

2. Activation and Mixing (see Instructions for capsules)
Activate and mix the capsule according to the information in the capsule instructions.
Mixing time for the capsules is 10 seconds.

Avoid lag times between the processes of activation, mixing and application as the material is in the process of setting which may impair or prevent application of the material.
All the cement required should be dispensed from the capsule within **30 seconds** from the start of mix.

3. Cementing
Avoid water and saliva contamination during application and setting of the cement. For a dry working area adequate isolation of the tooth is required.

Prepare the restoration according to manufacturer instructions.

Apply directly from the capsule into the lumens of the crown or bridge (approx. half) resp. to the bonding surface of inlays or onlays in a thin layer. Seat the restoration immediately (**working time 2:00 min** from start of mixing at 23°C). Net setting time without any light is approx. 4:00 min.

Remove excess cement at the first setting stage.

Maintain isolation until the set of the cement is verified (ca. 4:00 minutes). Setting can be optimized with **20 seconds** light cure with a suitable dental light cure unit (wavelength range 400–500 nm, light intensity min. 1000 mW/cm^2).

Note:
Higher temperatures will shorten the working time, lower temperatures will prolong the working time.

An overextended working time will cause the loss of adhesion to enamel and dentine.

4. Additional Notes/Warnings
- The material can also be used as liner under composite restorations.
- Unpolymerized material may have an irritant effect and can lead to sensitization against methacrylates.
- Avoid contact with skin, mucous membrane and eyes.
- If the material comes into contact with skin, in case of contact, remove the material with absorbent cotton soaked in alcohol and rinse with water. If the material comes into contact with eyes, immediately rinse with copious amounts of water and seek medical advice if required.
- Commercial medical gloves do not protect against the sensitizing effect of methacrylates.
- Keep away from children!

5. Storage
Store in a cool and dark place at 4-25 °C (39-77 °F). Temperature should not exceed 25 °C (77 °F). Do not use after expiry date.

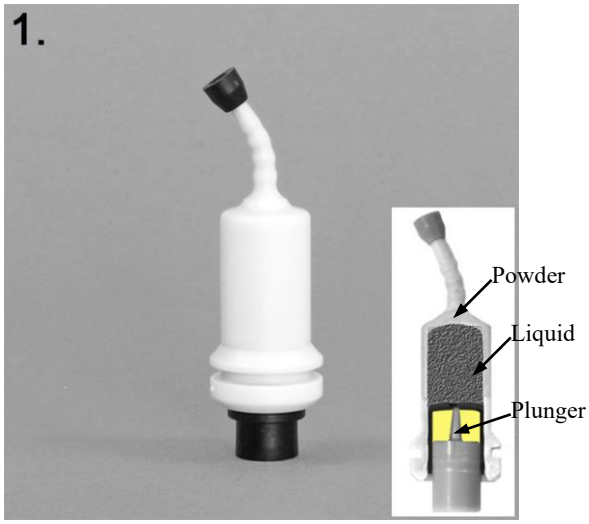
Capsules are for single use only.
Average net content per capsule : 0.4g

Composition
Powder: Dental glass, photo initiators
Liquid: polyalkenoate acid, methacrylates

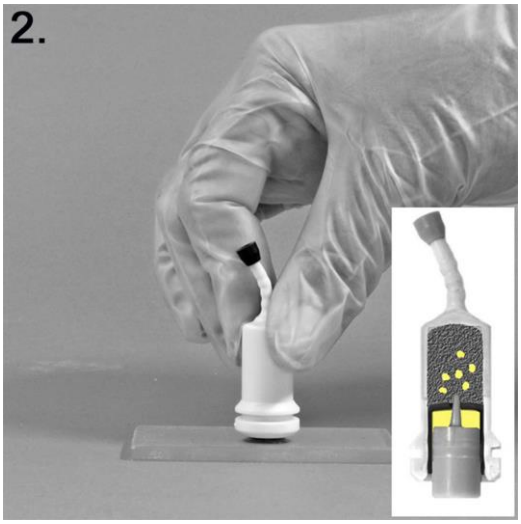
Disposal
Disposal of the product according to local authority regulations.

Distributed by:
Benco Dental Supply Co.
295 CenterPoint Blvd
Pittston, PA 18640
800-462-3626

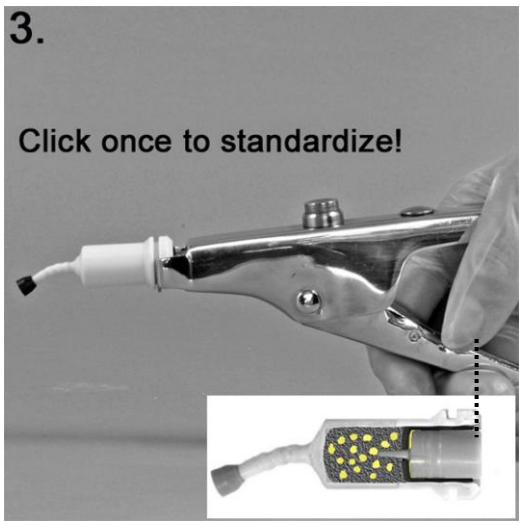
Instruction for activating and mixing capsules



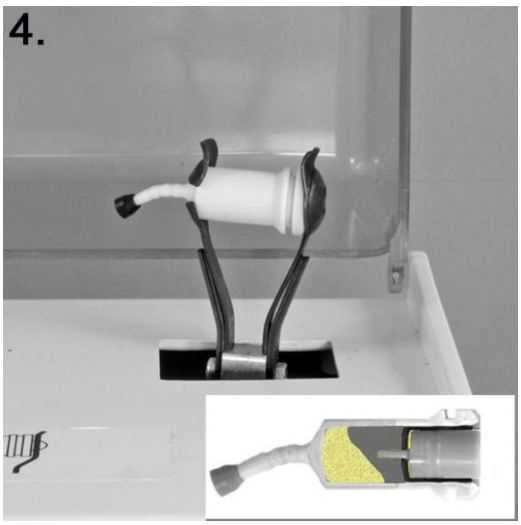
Capsule before activation.



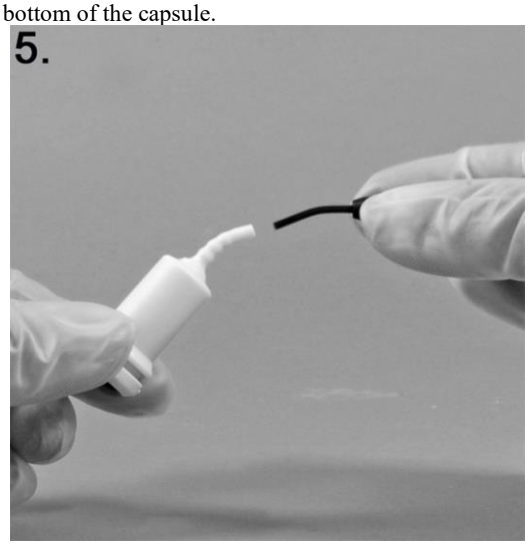
For activation of the capsule press the plunger on a hard and plane surface to the end into the capsule.



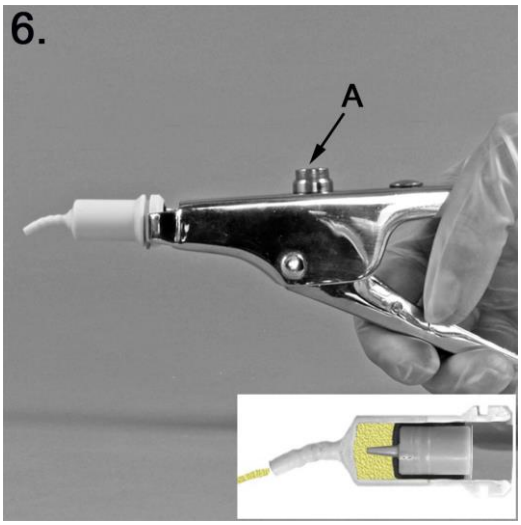
Insert the capsule into the applicator gun and **click once** to standardize.
Note: The plunger must be at the same level as the bottom of the capsule.



Insert the capsule into a mixer (or an amalgamator), close lid and mix immediately (about 4300 oscillations / min).
Mixing time: see corresponding instructions for use



Remove the pin from the nozzle.
If not, capsule can burst.



Insert the capsule into the applicator gun. Pull the lever 2 times (2 clicks) to prime the capsule. Extrude the mixed material directly into the preparation. Unlock the gun (push button A) and remove the capsule.