

### INDICATION

Permacem-Dual is a dual cure compomer cement for permanent luting of

- crowns and bridges
- inlays and onlays

### ADVANTAGES

- Especially suited for full ceramic restorations
- Automatic mixing
- Excellent fit owing to its low film thickness
- Isolates against thermal influences
- Radiopaque
- Fluoride release

### Please Note:

- **Do not use PermaCem together with Eugenol-containing materials.** We recommend the use of eugenol-free temporary cements (e.g. DMG's TempoCemNE-Automix).
- Avoid contact of PermaCem under the secondary crown when working with telescopic crowns and bridges.

### APPLICATION

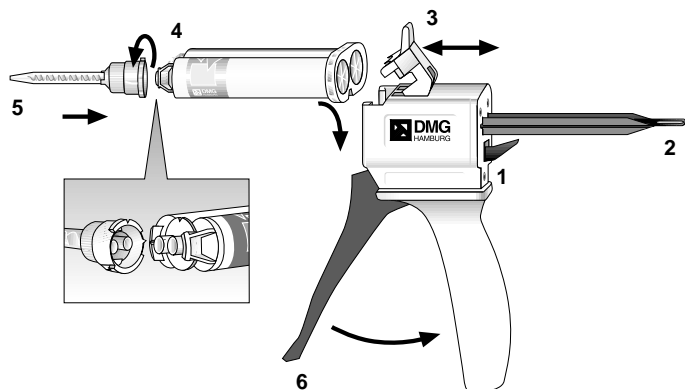
#### PREPARATION OF RESTORATION

1. Sandblast or etch internal aspect of restoration.
2. Thoroughly wash and dry internal surface of restoration before cementation.
3. Place separating medium (e.g. Vaseline, glycerine) on external aspect of restoration for ease of clean-up.

#### PREPARATION OF TOOTH

1. Cleanse prepared tooth surface thoroughly with pumice and water, or non-fluoride prophyl paste. Application of an antibacterial solution (i.e. chlorohexidine) is advantageous.
2. Rinse and dry with air syringe or cotton pellets, being careful to avoid pooling. Do not desiccate or contaminate.

#### CARTRIDGE SYSTEM



1. Push up the small lever (1) in back of the dispensing gun and make sure slide (2) is inserted completely into the dispensing gun.
2. Lift plastic lever (3) on top of gun and insert cartridge. Note: Notch on bottom of the cartridge aligns with the notch on the dispensing gun. Push down firmly on lever (3) to lock in cartridge.
3. Before attaching mixing cannula, remove cartridge cap (4) by turning 90° counter clockwise, pull and remove it.
4. Line up the notch on the mixing cannula (5) with the corresponding notch on the cartridge. Push a new mixing cannula (5) onto the cartridge and turn it clockwise 90° until it locks into position.
5. The material is dispensed through the mixing cannula by pulling the trigger (6) of the dispensing gun and can be applied directly.

- When using a cartridge for the first time, express a "pea" size amount of material and discard.
- Leave an used cannula on the cartridge. It serves as a cap.

#### Removal of Cartridge

Push up lever (1) and pull slide flush (2). Lift plastic lever (3) on the top of gun and remove cartridge.

### BONDING

Use a suitable bonding agent if a parallel sided preparation is not possible. Without a bond PermaCem-Dual's adhesion will be achieved by classical cement retention.

Do not use PermaCem-Dual with One-Bottle-Bonding systems. For application of a hydrophilic primer and a bond (2- or 3-Bottle-Bonding system), please refer to the respective instruction for use.

### CEMENTATION OF RESTORATION

1. Dispense PermaCem-Dual either into the restoration or directly onto the restoration from the cannula.

**Working time from start of mixing = 2 minutes**

2. Seat the restoration under light pressure. Verify complete seating, then have the patient bite slowly into occlusion. A bite stick may be used.

3. After placement, PermaCem-Dual will set under conditions of the mouth within 1:30 to 2:00 minutes, to a doughy state that allows clean-up.

**Clean-up: 1:30-2:00 minutes after placement**

4. Light cure the material with a usual dental halogen lamp for at least 20 seconds. After that the restoration is initially fixated.

Highly opaque ceramic materials, e.g. with aluminium oxide cores, may inhibit an effective light curing.

**Fixation of restoration: Light cure 20 seconds**

The restoration is fully functional after 5 minutes.

**Complete Setting: 5 minutes after placement**

### CLEAN-UP

Removal of excess material should be done during the doughy state (1:30-2:00 minutes after application). Easy removal of excess material in interproximal areas is only possible during this phase.

1. Remove all excess cement from around margins with a scaler. Begin with interproximal areas.
2. Floss interproximal areas gently.

### COMPOSITION

Ionomer glass in a Bis-GMA based matrix of dental resins, activator, catalyst and additives.

### SIDE EFFECTS

There are no known systemic side effects to date; however, do not use PermaCem

- in cases where known allergies to the components exist,
- if in some cases individual contact allergies may exist.

### STORAGE

- Store and use at room temperature 18-23 °C/64-73 °F (refrigerated material is more viscous and cures more slowly).
- Do not use after expiration date.

Federal law (USA) restricts this device to sale by, or on the order of a dentist, or other practitioner licensed by law of the state in which he or she practices to use or order the use of this device.

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