GC Fuji ORTHO™

Prior to use, carefully read the instructions for use.

SELF-CURED ORTHODONTIC BONDING ADHESIVE

GC Fuji ORTHO is a self-cured resin modified glass ionomer adhesive formulated for bonding orthodontic brackets, attachments, and appliances to enamel, porcelain and metal restorations. As a glass ionomer, it is self-adhesive to enamel and must be used in the presence of moisture.

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

RECOMMENDED INDICATIONS

- 1. Bonding metal brackets and attachments.
- 2. Bonding ceramic brackets.
- 3. Bonding acrylic appliances.
- 4. Band cementation only when extra band retention is desired.

CONTRAINDICATIONS

- In rare cases the product may cause sensitivity to some persons. If such reactions are experienced, discontinue the use of the product and refer to a physician.
- 2. Bonding polycarbonate brackets.
- 3. Cementation of stainless steel crown-retained appliances (e.g., Herbst Appliances).

DIRECTIONS FOR USE

1. Enamel Preparation

- a) Using a prophy cup or a brush, clean the bonding surfaces of the teeth with plain (non-fluoridated) pumice and water.
- b) Rinse thoroughly with water.
- c) Using a sponge or cotton pellet, apply GC Fuji ORTHO CONDITIONER to the bonding surfaces of the teeth for 20 seconds. Rinse thoroughly.

Although successful results have been obtained with no enamel pretreatment, conditioning of the enamel bonding surfaces will increase the adhesive's bond strength. It is therefore recommended, especially for new users of GC Fuji ORTHO. OPTIONAL

Etch the enamel bonding surfaces according to the etchant manufacturer's instructions. Rinse thoroughly. NOTE:

The enamel bonding surfaces must be moist. An overly dry or desiccated enamel surface will adversely affect the bond strength. The optimum level of surface moisture can be obtained by wiping the bonding surfaces of the teeth with a moistened cotton roll immediately prior to bracket bonding. If the bonding surfaces become desiccated during the bonding procedure, rehydrate by wiping them with the moistened cotton roll before bonding with GC Fuji ORTHO.

2. Powder and Liquid Dispensing

- a) The standard powder to liquid ratio is 3.0g/1.0g. 1 level scoop of powder to 1 drop of liquid.
- b) For accurate dispensing of powder, tap the bottle gently. Do not shake or invert.
- c) Hold the liquid bottle vertically and squeeze gently.
- d) Close bottles immediately after use.

3. Mixing

Divide the powder into 2 equal parts. Mix the first portion with ALL the liquid and mix for about 10 seconds. Incorporate the remaining powder and mix thoroughly for an additional 10-15 seconds (total 20-25 seconds).

Note

The working time is approximately 3 minutes from start of mixing at 23° C (73.4° F). Higher temperatures will shorten the working time, and lower temperatures will extend it.

4. Bonding Procedure

- A. Brackets
- a) Coat the bonding surface of the bracket completely with the mixed adhesive.
- b) Position the coated bracket on the tooth.
- Press the bracket firmly against the enamel surface. Using an explorer or a scaler, remove the excess adhesive at this time. Press the bracket again. Continue placing additional brackets. Place all brackets in a quadrant or in the full arch. More than one mix of adhesive may be necessary.

AFTER REMOVING EXCESS ADHESIVE, BE CAREFUL NOT TO DISTURB THE BRACKETS BEFORE THE ADHESIVE IS

MOVEMENT OF THE BRACKETS AT THIS POINT MIGHT DECREASE THE BOND STRENGTH.

- Allow the adhesive to cure approximately 5 1/2 minutes from start of mixing.
- e) Insert leveling wire and complete initial procedures. A light force wire (e.g., .016 NiTi or equivalent) is recommended at the initial bonding. Notes:
 - 1) Bonding ceramic brackets:
 - Chemically-retentive bases must be etched and silanated. If not etched and silanated by the manufacturer, etch and silanate before bonding with GC Fuji ORTHO. If bracket bases become
 - contaminated, follow the manufacturer's directions for cleaning, and/or etching and silanating. No treatment is required for mechanically-retentive bases.
 - Bonding brackets to porcelain restorations: Prepare porcelain surfaces by etching and silanating according to manufacturer's directions. Bond with GC Fuji ORTHO as per above.
 - Bonding brackets to amalgam/metal alloy restorations: Lightly roughen the metal surface with a disc or a fine diamond point before placing GC Fuji ORTHO.
- B. Acrylic Appliances
- a) Using a microetcher or a rotary instrument, roughen and place retention holes in the internal surfaces of the appliance.
- b) Prepare the teeth as mentioned in section #1.
- To facilitate removal of the appliance, place petroleum jelly on the occlusal surfaces of the teeth.
- d) Fill the internal surfaces of the appliance with GC Fuji ORTHO.
- e) Seat into proper position.
- f) Immediately remove excessive adhesive from the periphery of the appliance.
- Allow the adhesive to cure approximately 5 1/2 minutes from start of mixing.
- h) Appliance activation can begin at the patient's bedtime the same evening.

5. Debonding Procedure

A.Brackets

Grasp the bracket with a ligature cutter and, while supporting the tooth with fingers from the lingual side, give a sharp clockwise rotation to the bracket. If resistance is met, try again twisting in the opposite direction after desiccating (using an air syringe) the tooth around the bracket.

Remove any residual adhesive with a scaler or rotary instrument.

B. Appliances

To remove bonded appliances, flex the appliance in multiple sites with band removing pliers. If this does not remove the appliance, section the appliance, desiccate the adhesive, and remove the appliance.

STORAGE

Store in a cool and dark place (4-25°C / 39.2-77.0°F). (Shelf life: powder 3 years, liquid 2 years)

PACKAGES

1. Standard Package :

40g powder (1), 8g (6.8mL) liquid (2) with a powder scoop, a plastic spatula, a set of mixing pads (No. 23)

- 2. Replacement Packages :
 - a) 40g powder with a powder scoop
 - b) 8g (6.8mL) liquid

CAUTION

- 1. In case of contact with oral tissue or skin, remove immediately with a sponge or cotton soaked in alcohol. Flush with water.
- In case of contact with eyes, flush immediately with water and seek medical attention.
- 3. Do not mix powder or liquid with any other glass ionomer materials.