

QualiSense ADHESIVE T2

Dual Cure Bonding System for the Total Etch Technique

Instructions for Use

ADHESIVE T2 is a simple to use dual cure bonding system consisting of the two components **ADHESIVE T2 Part A** and **ADHESIVE T2 Part B** that were mixed before application. It is designed for strong bonding of **light cure, self-cure and dual cure composites** to etched enamel and dentine and to **non-precious and precious metals**. **ADHESIVE T2** can be also used for priming the root canals before cementation of endodontic posts with self or dual cure composites.

The strong adhesion of **ADHESIVE T2** to etched enamel or dentine proceeds on principles similar to that occurring with glass ionomer cements. Good, long lasting adhesive strength and good biocompatibility are attained by polycarboxylic acids.

ADHESIVE T2 can be used on slightly moist dentine surfaces (wet bonding technique).

Indications

Adhesive for:

- Composite based restorations with light cure, self-cure and dual cure composites

Side effects

In singular cases, **ADHESIVE T2** may cause a sensitizing reaction in patients with a hypersensitivity to any of the ingredients. In these cases, the material should not be used.

Irritations resulting from direct contact with the pulp cannot be ruled out. Therefore for pulp protection areas close to the pulp should be covered with thin layer of pulp capping material.

Incompatibility with Other Materials

Do not use in combination with substances containing eugenol because eugenol inhibits the polymerization of **ADHESIVE T2**. Neither store the material in proximity of eugenol containing products, nor let the material allow coming into contact with materials containing eugenol.

Application

1. Composite Fillings and Indirect Restorations

1.1. Isolation

Rubber dam is the recommended method of isolation.

1.2. Cavity Preparation

Clean the tooth with flour of pumice and water prior to preparation. Prepare the cavity with minimal tooth reduction. Margins should have a slight (0.5 - 1.0 mm) bevel placed in the enamel to increase the surface area for greater bond strength.

1.3. Pulp Protection

For pulp protection areas close to the pulp should be covered with a thin layer of pulp capping materials (e.g. **CH LINER**).

1.4. Enamel and Dentine Conditioning

Recommended is the total etch technique. Apply **ETCHING GEL** onto the enamel and dentine surfaces beginning with the enamel bevels. Condition the enamel for at least 15 seconds and the dentine for 15 seconds. (This results in 20–30 seconds etching of enamel and 15 seconds of dentine). Deciduous teeth are etched correspondingly longer. Rinse for 20 seconds with water. Dry it in a water-free and oil-free airstream, but do **not desiccate**. A slightly wet dentine surface is important for the function of **ADHESIVE T2**. The etched enamel bevel should have a chalky white appearance.

Etching precaution

It is essential, that etched areas are not contaminated by anything. If contamination occurs, re-etch, rinse with water and dry as above. Avoid **Etching Gel** contact with oral soft tissues, eyes and skin. If accidental contact occurs, flush immediately with copious amounts of water.

1.5. Application of ADHESIVE T2

For light cure composites:

Apply **ADHESIVE T2 Part A** generously with a brush onto the enamel and dentin surfaces for 30 seconds with agitation. The material should build a homogeneous layer. Remove excess material carefully. Dry cautiously with oil free air for about 15 seconds to remove all volatile components and to disperse the adhesive to an even layer. Do not desiccate the dentine.

Cure the **ADHESIVE T2 Part A** coating by exposing its entire area to a dental halogen light unit for 20 seconds before application of a second layer of **ADHESIVE T2 Part A**.

Notes: Do not rinse off the **ADHESIVE T2 Part A**! If not used immediately, place dispensed **ADHESIVE T2 Part A** in subdued light to prevent premature polymerization by incident light. The **ADHESIVE T2 Part A** will not self-cure.

Apply again the **ADHESIVE T2 Part A** generously with a brush onto the adhesive surfaces as described above before placement of a light cure composite.

For self-cure and dual cure composites

One drop of **ADHESIVE T2 Part A** and one drop of **ADHESIVE T2 Part B** were combined in a mixing pallet and mixed for 5-10 seconds under subdued light.

Note:

Do not interchange lids of the bottles, because this can lead to a cross-contamination of the liquids.

Apply the **ADHESIVE T2** mixture generously with a brush onto the enamel and dentine surfaces for 30 seconds with agitation. The material should build a homogeneous layer. Remove excess material carefully. Dry cautiously with oil free air for about 15 seconds to remove all volatile components and to disperse the adhesive to an even layer. Do not desiccate the dentine.

Cure the **ADHESIVE T2** coating by exposing its entire area to a dental halogen light unit for 20 seconds before application of a second layer of **ADHESIVE T2**.

Without light cure apply the second layer after drying with oil free air.

Apply again the **ADHESIVE T2** mixture generously with a brush onto the adhesive surfaces as described above before placement of a composite.

It is essential that the primed dentine and enamel surfaces are dry and contaminant free for the application of the composite.

The self-cure or dual cure composite can be applied immediately.

1.6. Application of the Composite

1.6.1. Direct Restorations

Apply the restorative material according to the instructions of the manufacturer.

Light cure restorative materials

Best results are obtained with application of a thin layer of a light cure flowable composite followed by the application of a moldable composite. Light cure each composite layer separately according to the corresponding user instructions.

Self or dual cure restorative materials

Apply a self cure or dual cure composite according to the user instructions. Light cure in case of dual cure composites shortens setting time.

1.6.2. Indirect Restorations

Refer to manufacturer's instructions for application of indirect restorations.

For cementing of the indirect restoration a self cure or dual cure composite cement is applied according to the user instructions.

2. Application of ADHESIVE T2 in Root Canals

2.1. Isolation

Use of a rubber dam to isolate the tooth is strongly recommended.

2.2. Root Canal Preparation

Prepare and clean the root canal according to the instructions of the selected post manufacturer. Dry the root canal but do not desiccate.

Etch the root canal with **ETCHING GEL** for 15 seconds and rinse with water using an endodontic irrigation syringe. Blot the canal dry with soft paper tips, leaving the dentin visibly moist. A slightly wet dentine surface is important for the function of **ADHESIVE T2**.

Etching Precaution

It is essential, that etched areas are not contaminated by anything. If contamination occurs, re-etch, rinse with water and dry as above. Avoid etching gel contact with oral soft tissues, eyes and skin. If accidental contact occurs, flush immediately with copious amounts of water.

2.3. Application of ADHESIVE T2

One drop of **ADHESIVE T2 Part A** and one drop of **ADHESIVE T2 Part B** were combined in a mixing pallet and mixed for 5-10 seconds under subdued light.

Note:

Do not interchange lids of the bottles, because this can lead to a cross-contamination of the liquids.

Apply **ADHESIVE T2** generously with a suitable brush on the prepared root canal walls for 30 seconds with agitation. The material should build a homogeneous layer.

Remove excess material carefully e.g. with paper points. Dry cautiously with oil free air to remove all volatile components and to disperse the adhesive to an even layer. Do not desiccate.

Optional cure the **ADHESIVE T2** coating by exposing its entire area to a dental halogen light unit for 20 seconds before application of a second layer of **ADHESIVE T2**.

2.4. Application of a 2nd Layer of ADHESIVE T2

Apply again the **ADHESIVE T2** generously with a brush onto the adhesive surfaces as described under 2.3. Optional light cure.

It is essential that the primed dentine and enamel surfaces are dry and contaminant free for the application of the composite.

Proceed immediately with placement of the post.

2.5. Post Cementation

Prepare the post according to manufacturer instructions.

Place the post with a flowable dual cure or self-cure composite (e.g. DC CORE) into the root canal. For post stabilization light cure the coronal part of the cemented post for **20 seconds**.

Warnings

- Unpolymerized material may have an irritating effect and may lead to a sensitizing reaction against methacrylates
- Avoid contact with skin, mucous membrane and eyes
- If the material comes into contact with skin, immediately wash with water and soap. 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.

Storage

Do not store above **25 °C (77 °F)**! Avoid storage in direct sunlight. **Do not use after expiration date.**

Warranty

DS Dental Supply GmbH warrants this product will be free from defects in material and manufacture. DS Dental Supply GmbH makes no other warranties including any implied warranty of merchantability or fitness for a particular purpose. User is responsible for determining the suitability of the product for user's application. If this product is defective within the warranty period, your exclusively remedy and DS Dental Supply GmbH's sole obligation shall be repair or replacement of the DS Dental Supply GmbH product.

Limitation of Liability

Except where prohibited by law, DS Dental Supply GmbH will not be liable for any loss or damage arising from this product, whether direct, indirect, special, incidental or consequential, regardless of the theory asserted, including warranty, contract, negligence or strict liability.

Keep away from children!

For dental use only!