

Prime&Bond® NT™ Dual Cure Universal Dental Adhesive System

DIRECTIONS FOR USE – ENGLISH

Prime&Bond® NT™ Dual Cure is a universal self-priming dental adhesive system designed to bond composite and compomer materials to enamel and dentin as well as to metals and ceramic. The reduction of components and treatment steps simplifies use, maintaining superior bond strengths and protection against microleakage. Prime&Bond® NT™ Dual Cure system is designed to be used with a dual cure/self cure resin cement such as Calibra® Esthetic Resin Cement to bond all indirect restorations including metal, ceramic and composite crowns, inlays, onlays, veneers and bridge retainers. Bonding of endodontic posts when used with Calibra® Esthetic Resin Cement, and bonding of dual cured FluoroCore® Fluoride Releasing Core Buildup Material to enamel and dentin also occurs with this system.

When used with the Amalgam Bonding Accessory Kit, available separately, the Prime&Bond® NT™ Dual Cure Universal Dental Adhesive System also adhesively bonds fresh amalgam to enamel and dentin. Use of other resin cements, dual/self cured composites or adhesives with Prime&Bond® NT™ Dual Cure Universal Dental Adhesive is at the discretion and sole responsibility of the dental practitioner.

Caulk® Tooth Conditioner Gel is included in both the Prime&Bond® NT™ Economy and Dual Cure Introductory Kits.

Caution: U.S. federal law restricts this device to sale by or on the order of a dentist.

COMPOSITION

Prime&Bond® NT™ Adhesive:

Di- and Trimethacrylate resins, PENTA (dipentaerythritol penta acrylate monophosphate), Photoinitiators, Stabilizers, Nanofillers - Amorphous Silicone Dioxide, Cetylamine hydrofluoride, Acetone

Self Cure Activator:

Mono- and Dimethacrylate Resins, Catalyst, Photoinitiators, Stabilizers, Acetone, Water

Amalgam Bonding Base and Amalgam Bonding Catalyst:

Dimethacrylate resins, Initiators, Stabilizers

Caulk® 34% Tooth Conditioner Gel (See complete directions for use enclosed):

Water, 34% Phosphoric acid, Silicon Dioxide, Surfactants, Blue Colorant

INDICATIONS

1. Direct, light cured composite and compomer restorative.
2. Indirect restorations; light cured, resin cemented veneers.
3. Composite, ceramic and amalgam repairs.
4. Cavity varnish for use with fresh amalgam.
5. Direct, dual cure or self cure composite restorations and core build-ups.
6. Indirect restorations; dual cured and self cured resin cemented inlays, onlays, crown and bridge retainers.
7. Dual cured and self cured resin cemented endodontic post cementation.
8. Adhesive bonding of direct amalgam restoration.

CONTRAINDICATIONS

1. Prime&Bond® NT™ Dual Cure Universal Dental Adhesive System is contraindicated for use with patients who have a history of severe allergic reaction to methacrylate resins or any of the components.
2. Prime&Bond® NT™ Dual Cure Universal Dental Adhesive System is contraindicated for direct application to dental pulp tissue (direct pulp capping).
3. Caulk® 34% Tooth Conditioner is contraindicated for use on dental pulp tissue.

WARNINGS

1. Caulk® 34% Tooth Conditioning Gel contains phosphoric acid, which may cause burns. Avoid contact with oral tissues, eyes and skin. Do not take internally.

Eye Contact: Tooth Conditioning Gel contains phosphoric acid, which may cause burn or may be irritating to eyes. Before using this product wear protective glasses as well as covering the patient's eyes to protect from squirting the material inadvertently. In case of accidental contact with eyes, rinse eyes immediately with plenty of water and seek medical attention.

Skin Contact: Tooth Conditioning Gel contains phosphoric acid, which can cause burns or skin sensitization in susceptible individuals. If contact with skin occurs immediately wipe off and flush with generous amounts of water, then wash well with soap and water after contact. If skin rash, irritation, sensitization or other allergic reaction occurs, seek medical attention immediately.

Oral Mucosa Contact: Avoid contact with oral soft tissues. If accidental contact occurs, flush mucosa with plenty of water and expectorate water. If sensitization of mucosa persists, seek medical attention immediately.

Ingestion: Do not swallow or take internally. If accidental swallowing occurs, drink lots of water. If nausea or illness develop, seek medical attention immediately. Contact regional Poison Control Center immediately.

2. Prime&Bond® NT™ Light Cured Dental Adhesive and Prime&Bond® NT™ Dual Cure Universal Dental Adhesive system contains polymerizable methacrylate monomers. Avoid prolonged or repeated contact with skin (allergic contact dermatitis), oral soft tissues, and eyes. Avoid prolonged inhalation. Do not take internally.

Eye Contact: Prime&Bond® NT™ Light Cured Dental Adhesive and Prime&Bond® NT™ Dual Cure Universal Dental Adhesive system contains methacrylates which may be irritating to eyes. Before using this product wear protective glasses as well as covering the patient's eyes to protect from splashing material. In case of contact with eyes, rinse immediately with plenty of water and seek medical attention.

Skin Contact: Prime&Bond® NT™ Light Cured Dental Adhesive and Prime&Bond® NT™ Dual Cure Universal Dental Adhesive system contains polymerizable monomers which can cause skin sensitization (allergic contact dermatitis) in susceptible individuals. If contact with skin occurs immediately wipe off thoroughly with cotton and alcohol and then wash well with soap and water after contact. If skin rash and sensitization or other allergic reaction occurs discontinue use and seek medical attention.

Oral mucosa contact: Avoid contact with oral soft tissues. If accidental contact occurs, flush mucosa with plenty of water and expectorate water. If sensitization of mucosa persists, seek medical attention immediately.

Ingestion: Do not swallow or take internally. If accidental swallowing occurs, drink lots of water. If nausea or illness develop, seek medical attention immediately. Contact regional Poison Control Center if necessary.

3. Prime&Bond® NT™ Light Cured Dental Adhesive and Prime&Bond® NT™ Dual Cure Universal Dental Adhesive contain acetone. Do not breathe vapor.
Inhalation: Give oxygen or artificial respiration if necessary.
4. Caulk® 34% Tooth conditioning Gel and Calibra® Silane Coupling Agent in syringes should extrude easily. DO NOT USE EXCESSIVE FORCE. Excessive pressure may result in unanticipated extrusion of the material.
5. For full coverage vital crown preparations, condition remaining enamel only. Etching of full coverage dentin surfaces is not recommended to minimize the possibility of post-operative sensitivity.
6. Caulk® 34% Tooth Conditioning Gel should not be used with patients who have a history of severe allergic reaction to any of the components.

PRECAUTIONS

1. This product is intended to be used only as specifically outlined in the *Directions for Use*. Any use of this product inconsistent with the *Directions for Use* is at the discretion and sole responsibility of the practitioner.
2. Wear suitable protective eyewear, clothing and gloves. Protective eyewear is recommended for patients.
3. Eugenol-containing dental materials should not be used in conjunction with this product because they may interfere with hardening and cause softening of the polymeric components of the material.
4. Insufficient data exist to support the use of desensitizing agents and/or cavity cleansing agents with Prime&Bond® NT™ Dual Cure Universal Dental Adhesive. Recommended pre-treatment is pumice or prophylaxis paste with a rubber cup. (See *Step-by-Step Instructions*)
5. Contact with saliva, blood and/or some astringent solutions during adhesive procedures may cause failure of the restoration. Use of a rubber dam or adequate isolation is recommended.
6. Exercise caution if mineral-impregnated (e.g., ferric compounds) retraction cords and/or hemostatic solutions are used in conjunction with adhesive procedures. In vitro studies have suggested compromised adhesive bond strength to enamel and dentin contaminated with hemostatic agents. Marginal seal may be adversely affected, allowing microleakage, subsurface staining and/or restoration failure. If gingival retraction is necessary, use of plain, non-impregnated cord is recommended.
7. In vitro studies have shown a relationship between adhesive performance and air-thinning/drying/solvent evaporation techniques. Improper over-thinning or under-evaporating may compromise bond strength, leading to microleakage, post-operative sensitivity and/or restoration failure. (See *Step-by-Step Instructions*)
8. The use of a dual cure adhesive system such as Prime&Bond® NT™ Dual Cure Dental Adhesive system can shorten working time of a dual cure resin cement system. This effect should be investigated in the laboratory prior to clinical use.
9. Replace original cap of Caulk® 34% Tooth Conditioning Gel tightly after each use to avoid evaporation. Discard dispensing tip after use, as dispensing tips may clog if gel is allowed to dry inside.
10. DENTSPLY Caulk supplies the appropriate dispensing tip for the Caulk® 34% Tooth Conditioning Gel. This tip is the only tip that should be utilized for placement of the gel.
11. The Prime&Bond® NT™ Dual Cure Universal Dental Adhesive System bottles should be tightly closed immediately after use.
12. Prime&Bond® NT™ Dual Cure Universal Dental Adhesive system is light-cured material. Proceed immediately once materials have been placed in mixing well/pad or protect from ambient light. The components are cured by visible light.
13. Use only in well ventilated areas.
14. Flammable: Prime&Bond® NT™ Light Cured Dental Adhesive and Prime&Bond® NT™ Dual Cure Universal Dental Adhesive contain acetone. Keep away from sources of ignition.
15. For use of Caulk® 34% Tooth Conditioning Gel on full coverage vital crown preparations see *Warnings* and *Step-by-Step Instructions*.
16. The efficacy of Caulk® 34% Tooth Conditioning Gel as an etchant/cleanser of indirect restorations has not been demonstrated.
17. Variable in-vitro data exist regarding use of light-cured-only adhesives such as Prime&Bond® NT™ Light Cured Dental Adhesive **without** Self Cure Activator in conjunction with dual cured or self cured resin cement such as Calibra® Esthetic Resin Cement in limited or no light curing applications. Chemical/Product incompatibility may adversely affect product efficacy, leading to premature restoration failure.
18. **Storage:** Prime&Bond® NT™ Dual Cure Nano Technology Universal Dental Adhesive should be kept out of direct sunlight and stored in a well ventilated place at room temperature not exceeding 25°C/77°F. Refrigerated storage is not required, but is acceptable when not in use. Allow material to reach room temperature prior to use.
Caulk® 34% Tooth Conditioning Gel: Store syringe with original cap only. Do not store syringe with dispensing tip in place, as this may harden the material making extrusion difficult. See *Warnings*. Not to be stored at temperature exceeding 25°C/77°F. Refrigerated storage is not required, but is acceptable when not in use. Allow material to reach room temperature prior to use. Protect from moisture. Do not freeze. Do not use after expiration date.

ADVERSE REACTIONS

1. Product may irritate the eyes and skin. **Eye contact:** irritation and possible corneal damage.
Skin contact: irritation or possible allergic response. Reddish rashes may be seen on the skin.

Mucous Membranes: inflammation, edema, sloughing. (See *Warnings*)

2. Product may cause serious health effects if ingested. (See *Warnings*)
3. Caulk® 34% Tooth Conditioning Gel may cause pulpal effects. (See *Contraindications and Warnings*)
4. Inhalation of vapors may cause varying degrees of damage to the affected tissue and also increased susceptibility to respiratory illness. (See *Precautions*)
5. The following medical conditions are generally aggravated by exposure:
Individuals with pre-existing skin disorders, eye problems or impaired liver, kidney and respiratory functions.

STEP-BY-STEP INSTRUCTIONS FOR USE

LIGHT CURED

1. **Direct restoration** (light cured composite resin and compomers)
 - 1.1 **Cleaning:** Clean uninstrumented enamel and dentin with a rubber cup and pumice or a cleaning paste such as Nupro® Prophylaxis Paste. Wash thoroughly with water spray and air dry. Clean freshly instrumented enamel and dentin with water spray and then air dry.
 - 1.2 **Pulp Protection:** For direct and indirect pulp capping, cover the dentin close to the pulp (less than 1mm) with a hard setting calcium hydroxide liner (Dycal® Liner) leaving the rest of the cavity surface free for bonding with Prime&Bond® NT™ Light Cured Dental Adhesive.
 - 1.3 **Tooth Conditioning/Dentin Pretreatment:** When used as a bonding agent for composite materials, it is recommended to follow the total etch technique described in 1.3.1. When used as a bonding agent for compomer materials in non-stress bearing situations, acid etching is optional.
 - 1.3.1 **Application of Caulk® 34% Tooth Conditioner Gel:** After application of rubber dam or other suitable isolation technique, apply Caulk® 34% Tooth Conditioner Gel. Attach disposable needle to end of syringe. Needle tip may be bent for easy access. Gently extrude Caulk® 34% Tooth Conditioner Gel (34% phosphoric acid) to the cavity surfaces starting at the enamel margins. For best results, condition enamel for at least 15 seconds and dentin for 15 seconds or less. Alternatively the conventional *enamel etch technique* can be followed. In this case, the enamel margins only are treated with Caulk® 34% Tooth Conditioner Gel for at least 15 seconds.
 - 1.3.2 **Rinsing and Blot Drying:** Remove gel with aspirator tube and/or vigorous water spray and rinse conditioned areas thoroughly for at least 10 seconds. Blot dry conditioned areas with a moist cotton pellet. Proceed immediately to application of Prime&Bond® NT™ Light Cured Dental Adhesive. **NOTE:** The goal of blot drying is to provide the correct amount of "wetness" on the tooth surface by removing all excess moisture and yet avoiding desiccating the dentin. Do not rub the tooth surface when blot drying. Dentin should be blotted until there is no pooling of water, leaving a moist, glistening surface. Once the surfaces have been properly treated, they must be kept uncontaminated. If salivary contamination occurs, repeat procedure beginning at step 1.1.
 - 1.4 **Application of Prime&Bond® NT™ Light Cured Dental Adhesive**
 - 1.4.1 **Conventional Bottle:** Dispense Prime&Bond® NT™ adhesive directly onto a clean disposable brush provided, making sure that the bottle does not come in direct contact with the brush, or place 2-3 drops of Prime&Bond® NT™ adhesive into a clean well. Replace cap promptly.
 - 1.4.2 Using the disposable brush supplied, immediately apply generous amounts of Prime&Bond® NT™ adhesive to thoroughly wet all the tooth surfaces. This surface should remain fully wet for 20 seconds and may necessitate additional applications of Prime&Bond® NT™ adhesive.
 - 1.4.3 Remove excess solvent by gently drying with clean, dry air from a dental syringe for at least 5 seconds. Recommended technique is to begin drying/evaporation with the syringe approximately 4-6 inches (10-15cm) away from the surface, gradually bringing the source to within 0.5 inches (10mm) of the surface over 5-10 seconds. Surface should have a uniform glossy appearance. If not, repeat application and air dry. Surface should not show areas of excessive adhesive thickness or pooling. Repeat air drying/evaporation outlined above if necessary.
 - 1.4.4 Cure Prime&Bond® NT™ adhesive for 10 seconds' using a curing light.
 - 1.5 **Completion:** Place light-cured restorative material over the cured Prime&Bond® NT™ adhesive as per restorative material manufacturer's directions.
2. **Veneer cementation** (light cured resin cement)
 - 2.1 **Cleaning:** See Section 1.1
 - 2.2 **Tooth Conditioning/Dentin pretreatment:** See Section 1.3

- 2.3 **Application of Prime&Bond® NT™ Light Cured Dental Adhesive:** Apply and light cure Prime&Bond® NT™ adhesive as described for direct restorations, see section 1.4.
- 2.4 **Preparation of restoration**
- 2.4.1 Treat surface of restoration according to manufacturers or dental laboratory's instructions, i.e., etching or mechanical roughening.
- 2.4.2 Apply Calibra® Silane Coupling Agent (available separately) to ceramic or porcelain restoration following manufacturer's instructions.
- 2.4.3 Apply a single coat of Prime&Bond® NT™ adhesive to the internal bonding surface of the restoration. Immediately air dry for 5 seconds.
- 2.4.4 Cure Prime&Bond® NT™ adhesive for 10 seconds¹ using a curing light.
- 2.5 **Cementation:** Prepare and apply light-cured resin cement according to manufacturer's instructions.
3. **Composite, ceramic and amalgam repairs** (light cured composite resin and compomers)
- 3.1 **Preparation, Cleaning:** Roughen the fractured surface as much as possible with a diamond bur. Create mechanical retention where possible. For best results, sandblast the area to be repaired with an intraoral microetcher (50µ alumina). Rubber dam is recommended with high speed evacuation. Rinse microetched areas for 15-20 seconds with water. Air dry. **NOTE:** Bevel porcelain margins before etching.
- 3.2 **Tooth Conditioning/Dentin Pretreatment:** Etch tooth with Caulk® 34% Tooth Conditioner Gel as outlined in section 1.3. Etch ceramic restoration repair area with hydrofluoric acid according to manufacturer's instructions.
- 3.3 **Treatment of the Restoration:** Rinse with water for 10 seconds. Air dry. **NOTE:** Apply Calibra® Silane Coupling Agent to porcelain surfaces to be repaired following manufacturer's instructions.
- 3.4 **Application of Prime&Bond® NT™ Light Cured Dental Adhesive:** Apply and light cure Prime&Bond® NT™ adhesive as described for direct restorations, see section 1.4.
- 3.5 **Completion:** Complete repair with placement and curing of desired shade(s) of light cured composite restorative following manufacturer's directions.
4. **Cavity varnish for use with fresh amalgam:** When used as a cavity varnish, Prime&Bond® NT™ adhesive is not an amalgam adhesive.
- 4.1 **Preparation:** Finish preparation by removing existing restorations and/or caries.
- 4.2 **Cleaning:** Clean preparation and place Dycal® Liner if needed, following section 1.1 and 1.2.
- 4.3 **Tooth Conditioning/Dentin Pretreatment:** Rinse and carefully air dry cavity preparation, but do not desiccate exposed dentin. **NOTE:** Acid etching of prepared cavity (enamel or enamel/dentin) is optional prior to placement of Prime&Bond® NT™ Adhesive. If desired, follow section 1.3.
- 4.4 **Application of Prime&Bond® NT™ Light Cured Dental Adhesive:** Apply and light cure Prime&Bond® NT™ adhesive as described for direct restorations, see section 1.4.
- 4.5 **Completion:** Place and condense amalgam (e.g. Dispersalloy® Dispersed Phase Alloy) as per manufacturer's directions.

STEP-BY-STEP INSTRUCTIONS

DUAL CURED

5. **Direct restorations:** Dual Cure or Self Cure composite/core build up
- 5.1 **Preparation:** Finish preparation by removing existing restorations and/or caries.
- 5.2 **Cleaning:** Clean preparation and place Dycal® Liner if needed, following section 1.1 and 1.2.
- 5.3 Place pin, post or matrix as needed.
- 5.4 **Tooth Conditioning/Dentin Pretreatment:** When used as a bonding agent for composite materials, it is recommended to follow the total etch technique described in section 1.3.
- 5.5 **Application of Prime&Bond® NT™ Dual Cure Dental Adhesive System**
- 5.5.1 Place 1-2 drops of Prime&Bond® NT™ Adhesive into a clean plastic mixing well. Replace cap promptly.
- 5.5.2 Place an equal number of drops of Self Cure Activator into the same mixing well. Replace cap promptly. Mix contents for 1-2 seconds with a clean, unused brush tip.
- 5.5.3 Using the disposable brush supplied, immediately apply mixed adhesive/activator to thoroughly wet all the tooth surfaces. These surfaces should remain fully wet for 20 seconds and may necessitate additional applications of mixed adhesive/activator.
- 5.5.4 Remove excess solvent by gently drying with clean, dry air from a dental syringe for at least 5 seconds. Recommended technique is to begin drying/evaporation with the syringe approximately 4-6 inches (10-15cm) away from the surface, gradually bringing the source to

within 0.5 inches (10mm) of the surface over 5-10 seconds. Surface should have a uniform glossy appearance. If not, repeat application and air dry. Surface should not show areas of excessive adhesive thickness or pooling. Repeat air drying/evaporation outlined above if necessary.

- 5.5.5 Cure mixed adhesive/activator for 10 seconds¹ using a curing light.
- 5.6 Dispense and mix dual cure or self cure composite per manufacturer's directions.
- 5.7 **Placement of self cure composite material:** Follow section 5.7.2, Chemical Self Cure, below. Any of the following placement techniques are acceptable. The preferred method is to use both visible light and chemical self cure (see step 5.7.3 Dual Cure)
- 5.7.1 **Visible Light Cure:** Place mixed material directly in increments and light cure each increment per manufacturer's instructions.
- 5.7.2 **Chemical Self Cure:** Place large increment(s) or load mixed material into a clear crown form and seat onto the preparation. Allow to self cure per manufacturer's instructions. Visible Light Curing of external surface is optional, but advisable.
- 5.7.3 **Dual Cure:** After placing the first increment, and light curing, large increments may then be placed or material loaded into a clear crown form and seated onto the preparation. Allow to self cure per manufacturer's instructions. Visible Light Curing of external surface is optional, but advisable.
- 5.8 **Finishing:** After allowing manufacturer's recommended set time, remove matrix, and apply an optional but advisable surface light curing. Gross reduction may begin immediately.
6. **Indirect restorations:** Dual Cure inlays, onlays, crowns and bridge retainers
- 6.1 **Cleaning:** See section 1.1
- 6.2 **Tooth Conditioning/Dentin Pretreatment**
- 6.2.1 For full coverage crowns on vital teeth it is recommended not to etch dentin to minimize the possibility of post-operative sensitivity. Proceed to application of Prime&Bond® NT™ Dual Cure Universal Dental Adhesive System, step 6.3.
- 6.2.2 When used as a bonding agent for inlays or onlays, it is recommended to follow the total etch technique described in section 1.3. Once the surfaces have been properly treated, they must be kept uncontaminated. If salivary contamination occurs, repeat procedure beginning at step 6.1.
- 6.3 **Application of Prime&Bond® NT™ Dual Cure Dental Adhesive System:** When used as a bonding agent for inlays, onlays, crowns or bridge retainers, it is recommended to follow the dual cure mixed adhesive/activator application technique described in section 5.5.
- 6.4 **Preparation of restoration**
- 6.4.1 Treat surface of restoration according to manufacturers or dental laboratory's instructions, i.e., etching or mechanical roughening.
- 6.4.2 Apply Calibra® Silane Coupling Agent (available separately) to ceramic or porcelain restoration following manufacturer's instructions.
- 6.4.3 Apply a single coat of mixed adhesive/activator to the internal bonding surface of the restoration. Immediately air dry for 5 seconds.
- 6.4.4 Cure mixed adhesive/activator for 10 seconds¹ using a curing light.
- 6.5 **Cementation:** Prepare and apply dual cured resin cement, according to manufacturer's instructions.
7. **Endodontic Post Cementation**
- 7.1 **Cleaning:** See section 1.1
- 7.2 **Tooth Conditioner/Dentin Pretreatment**
- 7.2.1 Rinse and thoroughly dry the prepared post preparation space (using air and paper points).
- 7.2.2 Apply Caulk® 34% Tooth Conditioner Gel (34% phosphoric acid). Attach disposable needle to end of syringe. Needle tip may be bent for easy access. Gently extrude Caulk® 34% Tooth Conditioner Gel to the post space and maintain contact for 15 seconds followed by a 10-second rinse. The preparation post space should then be dried with a gentle air blast and paper points to remove residual moisture, but do not desiccate the conditioned dentin surface. Once the surfaces have been properly treated, they must be kept uncontaminated. If salivary contamination occurs, repeat procedure beginning at step 7.2.
- 7.3 **Application of Prime & Bond® NT™ Dual Cure Dental Adhesive System**
- 7.3.1 Place 1-2 drops of Prime & Bond® NT™ adhesive into a clean plastic mixing well. Replace cap promptly.
- 7.3.2 Place an equal number of drops of Self Cure Activator into the same mixing well. Replace cap promptly. Mix contents for 1-2 seconds with a clean, unused brush tip.
- 7.3.3 Apply mixed adhesive/activator to post preparation with the brush provided, being sure to apply generous amounts to the preparation

orifice. A paper point pre-wet with the adhesive mixture may aid in bringing the adhesive mixture down to the deepest portion of the preparation. Maintain contact of adhesive/activator with tooth structure for at least 20 seconds.

- 7.3.4 Remove excess solvent by gently drying with clean, dry air from a dental syringe for at least 5 seconds. Recommended technique is to begin drying/evaporation with the syringe approximately 4-6 inches (10-15cm) away from the surface, gradually bringing the source to within 0.5 inches (10mm) of the surface over 5-10 seconds. Surface should have a uniform glossy appearance. If not, repeat application and air dry. Surface should not show areas of excessive adhesive thickness or pooling. Repeat air drying/evaporation outlined above if necessary. Use of clean, dry paper points may aid in thorough removal of solvent/excess adhesive in post space.
- 7.3.5. Cure mixed adhesive/activator for 10 seconds¹ using a curing light.

7.4 Preparation of post

- 7.4.1 Treat surface of post according to manufacturer's or dental laboratory's instructions, i.e., etching or mechanical roughening.
- 7.4.2 Apply Calibra® Silane Coupling Agent (available separately) to ceramic or porcelain post following manufacturer's instructions.
- 7.4.3 Apply a single coat of mixed adhesive/activator to the post. Immediately air dry for 5 seconds.
- 7.4.4 Cure mixed adhesive/activator for 10 seconds¹ using a curing light.

7.5 Post Cementation

- 7.5.1 Mix dual cured resin cement components according to manufacturer's directions and spread on surface of post and/or into the post preparation with a syringe tip, Lentulo Spiral, or metal file.
- 7.5.2 Seat post immediately. Clean up excess with appropriate instruments.
- 7.5.3 Light cure the coronal portion of cemented post for 20 seconds to aid in post stabilization once fully seated.
- 7.5.4 Proceed with core build-up and/or preparation as directed by resin cement manufacturer's directions.

8. Adhesive bonding of direct amalgam restorations

- 8.1 **Preparation:** Finish preparation by removing existing restorations and/or caries.
- 8.2 **Cleaning:** Clean preparation and place Dycal® Liner if needed, following section 1.1 and 1.2.
- 8.3 **Tooth Conditioning/Dentin Pretreatment:** When used as a bonding agent for amalgam materials, it is recommended to follow the total etch technique described in section 1.3. Once the surfaces have been properly treated, they must be kept uncontaminated. If salivary contamination occurs, repeat procedure beginning at step 8.2.
- 8.4 **Application of Prime & Bond® NT™ Dual Cure Dental Adhesive System:** When used as a bonding agent for amalgam materials, it is recommended to follow the dual cure mixed adhesive/activator application technique described in section 5.5.
- 8.5 **Application of Amalgam Bonding Base & Amalgam Bonding Catalyst**
- 8.5.1 Dispense two drops of Amalgam Bonding Base into a separate, clean plastic mixing well. Replace cap securely.
- 8.5.2 Dispense two drops of Amalgam Bonding Catalyst into the same mixing well. Replace cap securely. Mix contents of plastic well for 1 to 2 seconds with new, clean disposable brush tip.
- 8.5.3 Using the disposable brush, apply the mixed Amalgam Bonding Agents by coating the entire preparation.
- 8.6 **Completion:** Immediately begin placing and condensing amalgam (e.g. Dispersalloy® Dispersed Phase Alloy) as per manufacturer's directions.

CLEANING AND DISINFECTION

To prevent Prime & Bond® NT™ and Self Cure Activator bottles from exposure to spatter or spray of body fluids or contaminated hands, or oral tissues, use of a protective barrier is recommended to avoid package contamination. Repeated disinfection may damage label.

Do not attempt to clean, disinfect or re-use applicator brush. Properly dispose used brushes. The re-usable brush handle may be cleaned by scrubbing with hot water and soap or detergent. Do not autoclave brush handle. Disinfect as outlined below.

DISINFECTION OF RE-USABLE BRUSH HANDLE

The brush handle if exposed to spatter or spray of body fluids or that may have been touched by contaminated hands, or oral tissues, should be disinfected with a hospital-level disinfectant. Acceptable disinfectants are EPA-registered as tuberculocidal. Iodophors, sodium hypochlorite (5.25%), chlorine dioxide and dual or synergized quaternaries are approved disinfectants. Disinfect the brush handle by immersing it in any recommended hospital-level disinfectant except neutral glutaraldehyde for the contact time recommended by the disinfectant manufacturer for optimum results. Some phenolic-based agents and iodophor-based products may cause surface staining. Agents containing organic solvents, such as alcohol, may tend to dissolve the plastic. The disinfectant manufacturer's directions should be followed properly for optimum results. Water-based disinfectant solutions are preferred.

LOT NUMBER AND EXPIRATION DATE

1. Do not use after expiration date. ISO standard is used: "YYYY/MM"
2. The following numbers should be quoted in all correspondence:
 - Reorder Number
 - Lot number on syringe/bottle
 - Expiration date on syringe/bottle

¹ Check curing light for minimum curing output of at least 550mw/cm² and a spectral output including 470nm (peak absorption of the CQ photoinitiator).

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Form #534354 (R 10/3/05)