



## Light Cured Restorative Nanohybrid Composite Kit

# DSI UniLite Nano Kit



## INSTRUCTIONS FOR USE

### DSI UniLite Nano Composite

is a visible light cured, radiopaque highly filled fine composite restorative material for anterior and posterior restorations of all teeth.

#### **COMPOSITION**

Bisphenol A Glycidyl Methacrylate, Ethoxylated Bisphenol A Dimethacrylate, Urethane Dimethacrylate, Triethylene Glycol Dimethacrylate, Silanated Barium Glass Powder, Amorphous Fumed Silica.

#### **INDICATIONS**

**DSI UniLite Nano** composite is indicated for direct filling of class I, II, III, IV and V Cavities in anterior and posterior teeth. Preventive resin restoration and repair of composite / ceramic veneers.

#### **DIRECTION FOR USE**

Clean the tooth to be treated and adjacent teeth with a brush and prophylaxis paste. Select the shade using VITA Shade Guide. Prepare the cavity using conservative cavity technique. No residual amalgam or other base material should be left in the cavity. Cover the area close to the pulp with hard setting Calcium Hydroxide paste. Apply **UniEtch Gel** for 15-20 sec. Remove Gel with vigorous water spray and rinse conditioned area for at least 10 sec. Blot dry conditioned area with a moist cotton pellet. Apply **DSI S5** bonding agent with a disposable brush to the entire cavity. Ensure thorough wetting of the entire cavity. Allow 20 second air drying and re-apply another coat of dentine bonding agent. Remove excess solvent by gently drying with dry air for at least 5 sec to ensure a uniform glossy surface. Cure adhesive for 20-30 sec using standard curing light. Remove syringe cap and dispense material onto a mixing pad. Place the material into the cavity using a suitable placement instrument. After dispensing, the screw plunger should be rotated anti-clockwise by half to full turn to release residual pressure inside the syringe. Contour the material in the cavity. Light cure for 40 sec using standard curing light. When necessary build in increments of 2 mm maximum using a layering technique. Shape and polish using standard technique and at the last stage apply protective varnish.

**Warning:** Avoid prolonged or repeated contact with skin (allergic contact dermatitis), and eyes. Avoid prolonged inhalation. Do not take internally contact with the skin may cause irritation, burns of hypersensitivity. If contact with skin occurs immediately wipe off thoroughly with cotton and alcohol and then wash well with soap and water. If skin rash and sensitization or other allergic reaction occurs discontinue use and seek medical attention. If the product comes into contact with the eyes, rinse thoroughly with fresh water and consult a physician.

#### **CONTRAINDICATIONS**

If allergic to methacrylate resins.

## **PRECAUTIONS**

Eugenol containing materials should not be used with this product because they may effect polymerization and interfere with the hardening process. Being sensitive to heat and light, the syringes should be kept away from direct sun light.

## **STORAGE**

Store at temperature between 10°C to 24°C. Close the cap carefully after use. Keep away from moisture. Shelf life not affected after opening if stored in a cool dry place.

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## **DSI S5**

Is a light curing, single component bonding agent for use in combination with adhesive restorations. **DSI S5** adhesive was developed for bonding composites and compomers to the tooth structure as well as for bonding amalgams and indirect restorations (e.g. porcelain). **DSI S5** adhesive primes and bonds in one step. Prior to the application of **DSI S5** the tooth structure is conditioned with **UniEtch gel**. By mixing **DSI S5** adhesive with Self-Cure Activator, a universal, dual cure self-priming dental adhesive system is obtained. This system is designed to bond dual or self-cured composites to enamel, dentine and restorative materials even in areas inaccessible to light.

## **COMPOSITION**

Urethane Dimethacrylate, Triethylene Glycol Dimethacrylate, Bisphenol A Diglycidyl Methacrylate, 2-Hydroxy Ethyl Methacrylate, Tertiary Butanol, Photoinitiators, Stabilizer.

### **1. INDICATIONS**

- Adhesive for direct, light-curing and dual-curing composite and compomer restorations.
- Adhesive for light-initiated resin cements used in conjunction with indirect all-ceramic and composite restorations (inlays, onlays, veneers and full-coverage crowns).

**Precautionary Information for Patients:** This product contains substances that may cause an allergic reaction by skin contact in certain individuals. Avoid use of this product in patients with known acrylate allergies. If prolonged contact with oral soft tissue occurs, flush with large amounts of water. If allergic reaction occurs, seek medical attention as needed, remove the product if necessary and discontinue future use of the product.

**Precautionary Information for Dental Personnel:** This product contains substances that may cause an allergic reaction by skin contact in certain individuals. To reduce the risk of allergic response, minimize exposure to these materials. In particular, avoid exposure to uncured product. If skin contact occurs, wash skin with soap and water. Use of protective gloves and a no-touch technique is recommended. Acrylates may penetrate in commonly used gloves. If product penetrate glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. If allergic reaction occurs, seek medical attention as needed.

## **DIRECTION FOR USE**

- Isolation: Rubber dam is the preferred method of isolation.
- Cavity preparation: Prepare cavity with minimal tooth reduction. Bevel cavosurface enamel margins.
- Etching: Apply etchant to enamel and dentin. Wait 15 sec. Rinse for 10 sec. Blot excess water using a cotton pellet or minisponge. The surface should appear glistening without pooling of water.
- Adhesive: Immediately after blotting, apply 2-3 consecutive coats of adhesive to etched enamel and dentin for 15 sec with gentle agitation using a fully saturated applicator. Gently air thin for 5 sec to evaporate solvents. Light cure for 20-30 sec.
- Restorative placement, cure and finishing: Refer to manufacturer's instructions for placement, cure and finishing of restorative materials.

### **Bonding porcelain veneers:**

1. Silane treatment: Porcelain bonding surfaces should have been etched using hydrofluoric acid by the dental laboratory. Apply Ceramic Primer to the bonding surface of the veneer. Dry for 5 sec. Clean the prepared teeth in preparation for seating and bonding using a plain pumice slurry. Rinse thoroughly and dry.
2. Etching: Apply etchant to both enamel and dentin. Wait 15 sec. Rinse for 10 sec. Blot excess water using a cotton pellet or mini-sponge. The surface should appear glistening without pooling of water. An additional 15 sec etch time may be appropriate for teeth that were not prepared using a diamond bur. Residual organic matter can also require additional etch time.
3. Adhesive: Immediately after blotting, apply 2-3 consecutive coats of adhesive to etched enamel and dentin for 15 sec with gentle agitation using a fully saturated applicator. Gently air thin for 5 sec to evaporate solvents. Do not light cure.
4. Adhesive application to veneer: Apply 1 coat of adhesive to the acid etched, silane treated veneer. Dry thoroughly. Do not light cure.
5. Luting material application to veneer: Apply luting Cement to the bonding surface of veneer.
6. Seating and curing: Carefully seat the veneer. Clean excess luting cement from the veneer margins. Cure each area of the veneer for times recommended by the luting cement manufacturer. We recommend curing the gingival margin first, followed by the body and the incisal margin. Avoid direct contact with the light-guide during initial curing.

### **CONTRAINDICATIONS**

1. Do not use **DSI S5** adhesive if a patient is known to be allergic to any of the material's ingredients or if the stipulated working technique cannot be used.
2. Bonding **S5** adhesive must not be used in conjunction with purely self curing composite materials. Dual-curing materials must be light activated.
3. Do not use **DSI S5** adhesive for direct pulp capping.

### **SIDE EFFECTS**

In rare cases, ingredients of Fusion Bond 5 adhesive may cause sensitization. In these cases, the material should no longer be used.

### **INTERACTIONS**

Materials containing eugenol or clove oil may inhibit the polymerization of **DSI S5** adhesive.

### **WARNING**

**DSI S5** adhesive is an irritant. Contact with the skin, mucous membranes or eyes should be avoided. In case of skin contact, immediately wash with soap and water. If the material should come into contact with the eyes, immediately rinse with copious amounts of water for at least 15 minutes and consult a physician or ophthalmologist. In rare cases, contact with the skin may lead to a sensitization towards methacrylates. Commercial medical gloves do not provide protection against the sensitizing effects of methacrylate.

### **STORAGE**

Store at temperature between 10°C to 24°C. Close the cap carefully after use. Keep away from moisture. Shelf life not affected after opening if stored in a cool dry place.

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## **UniEtch Etching Gel**

Is a blue tinted viscous gel of 37% Phosphoric acid for etching tooth enamel and dentin conditioning or composite surfaces prior to the bonding of any composites, sealants or bonding adhesives.

### **COMPOSITION**

Phosphoric Acid, Methylene Blue Indicator, Glycerine, Ethanol, Purified Water and Amorphous Silica.

## **INDICATIONS**

Used for conditioning both dental enamel and dentine surfaces prior to the placement of an adhesive restoration.

## **DIRECTION FOR USE**

Clean the area to be etched, rinse and dry thoroughly. Place the tip against the surface to be etched and slowly dispense the gel on the surface to lay a fine line or paint a thin layer to the areas to be etched. Allow the gel to stay for 10-15 sec and rinse thoroughly with water spray. Dry etched tooth surface with clean, dry air.

## **PRECAUTIONS**

The product contains phosphoric acid. It can burn and cause irritation to the tissues and therefore confine the use to areas to be etched. Fix the applicator tip to the syringe and check the flow of gel before applying on the etching surface. Avoid contact with eyes and prolonged contact with skin.

## **WARNING**

Avoid prolonged or repeated contact with skin (allergic contact dermatitis), and eyes. Avoid prolonged inhalation. Do not take internally. Contact with the skin may cause irritation, burns or hypersensitivity. If contact with skin occurs immediately wipe off thoroughly with cotton and alcohol and then wash well with soap and water. If skin rash and sensitization or other allergic reaction occurs discontinue use and seek medical attention. If the product comes into contact with the eyes, rinse thoroughly with fresh water and consult a physician. It should not be used with patients who have a history of severe allergic reaction to any of the components.

## **STORAGE**

Store at temperature between 10°C to 24°C. Close the cap carefully after use. Keep away from moisture. Shelf life not affected after opening if stored in a cool dry place.

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## **KIT CONTENT**

- 7 x UniLite Nano Syringes 4g (A1, A2, A3, A3.5, B1, B2, BL)
- 1 x S5 Bonding, Dropper-bottle 5ml
- 1 x UniEtch Etching Gel, Syringes 2ml
- 10 x Micro Brushes
- 10 x Applicator Tips

**Ref: ULN-S**

## **SYMBOLS**



Consult instructions for use



Caution, consult accompanying documents



Temperature limit



Keep away from sunlight



Keep dry



Manufacturer



Catalogue number



Batch code



Use by



Date of Manufacture

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*Failure to comply with the conditions of storage leads to a change of the working characteristics of the material and decrease the shelf life of the material.*

*The manufacturer is not responsible for any loss of quality caused by the failure to comply with terms of transportation, storage and use established by the manufacturer for this product. Responsibility for the use of the material for purposes other than those specified by the manufacturer falls on the user.*



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