

ENDURE NANO

NANOHYBRID COMPOSITE

Light-cure, multi-purpose, esthetic, restorative material

FOR PROFESSIONAL USE ONLY
INSTRUCTIONS FOR USE

INDICATIONS:

Edure Nano is indicated for direct esthetic restoration of anterior and posterior teeth. It provides exceptional esthetics since it is formulated in shades matching the VITA® Shade Guide. This nanohybrid composite can be used in all classes of direct dental restorations: Class I, II, III, IV, and V.

DESCRIPTION:

- Edure Nano contains a ytterbium fluoride mono-dispersed nano-sized particle which combined with regular silica and barium glass composes a state of the art nano-filler system.
- Edure Nano is a high viscosity composite that will resist sticking to instruments, yet will have sufficient flow to adapt to the walls of the cavity preparation.
- Edure Nano is radio-opaque and provides high compressive and flexural strengths along with a low water uptake.

FORMULATION:

The resin based matrix contains approximately 19 wt % of BisGMA based dimethacrylate system. The filler system contains approx. 80 wt% (65 vol%) silanated 40 nanometer ytterbium fluoride, silanated 500 nanometer barium glass and 10 nanometer silica. There is approximately 1 wt% of catalyst, inhibitors and pigments.

DIRECTIONS FOR USE:

1. Teeth should be cleaned by scaling and prophylaxis with flour of pumice.
2. Shade selection should be performed prior to isolation and/or preparation of the teeth. Do not stare at the tabs and teeth for more than 10-15 seconds during shade selection. Use of a VITA Shade Guide is recommended.
3. Isolate the teeth. Use of a rubber dam is highly recommended.
4. Follow usual dental procedure for cavity preparation, leaving no residual material or base from any previous restoration.
5. Base the preparation as needed. Calcium hydroxide cement may be used for covering small pulpal exposures. Any additional dentinal coverage desired can be achieved by using a glass ionomer lining cement. Eugenol containing cement must be avoided.
6. Place the appropriate matrix or crown form to assure proper proximal contour of the tooth. Place wedges to produce good gingival adaptation and teeth separation. Burnish the matrix to achieve proximal contact. The matrix may be placed following the adhesive application step if preferred.
7. Use a state of the art dentin/enamel bonding system to bond this composite to the tooth structure. Modified bonding systems can be used to bond this composite to other kinds of materials used in restorative techniques. Cure the bonding resin before placing the composite. Follow the manufacturer's instructions.
8. Dispense onto a mixing pad the amount of composite needed to complete the restoration(s). Protect the dispensed material from direct light exposure with an opaque cover. Avoid placing under direct intensity of the operator light during the delivery process.
9. The composite should be placed into the preparation in increments no greater than 2.5 mm. It is important to use thinner layers for darker shades. Place the composite into the cavity using an appropriately designed dental hand instrument and adapt the composite to the walls of the preparation.
10. Using any acceptable dental curing lamp, cure each layer for 30 seconds (recommendation: use a quartz-tungsten-halogen curing light with a minimum radiance of 500 mW/cm² in the spectral range of 470-480 nanometers). An additional 20 seconds may be used from other directions. Any wedge and/or matrix can be removed after the last layer of composite is cured. Do not allow any contamination with saliva or washing between cured layers.
11. After curing, remove flash with a sharp instrument. If necessary adjust restoration to proper margins, contours, contacts and occlusion. Finish using a fine diamond, multifluted carbide finishing bur, or finishing disc and strips.
12. Rubber cups and points and various polishing pastes are available which can enhance the polish.
13. After the polishing procedure is completed, microscopic surface defects can be resealed. The composite surface can be cleaned and the surrounding enamel re-etched with phosphoric acid, washed and dried thoroughly. The bonding agent is applied in a thin layer, dried and cured.

1. VITA is a registered trademark of VITA Zahnfabrik, Bad Säckingen, Germany.

STORAGE:

- This material is designed to be stored between 50 °F - 75 °F (10 °C - 24 °C).
- If stored in a refrigerator, bring to room temperature prior to use.
- Replace cap immediately after dispensing.
- Do not store in proximity to eugenol-containing products.
- Do not store the product in intense light, or under wet conditions.

WARNINGS

- Some uncured monomers can cause skin irritation in some individuals.
- These composite materials contain dimethacrylate resins and other components that may cause an allergic response. Do not use in individuals with allergies to these materials.
- To reduce these risks avoid exposure to uncured resin.
 - »» If contact with eyes occurs, flush with copious amounts of water.
 - »» If contact with skin occurs, wash with soap and water.
 - »» In case of ingestion, seek medical attention immediately.
- Dentists and assistants should wear gloves, masks and protective eye wear.
- Patients should also wear eye protection.
- Test the dental curing light periodically to assure sufficient intensity of the light output.
- Any re-usable, sterilizable instrument that is handled in the delivery of the dental service should be sterilized.
- Any non-sterilizable item that is handled in the delivery of the dental service should be disinfected by standard dental office hygiene procedures.
- Do not use eugenol-containing materials on the tooth since eugenol can retard the curing process.
- Do not allow saliva or water contamination of etched tooth surface, unset material, set material, or during any step in the subsequent restorative procedure.
- Do not use beyond the shelf life indicated on the packaging.
- For additional information consult the Safety Data Sheet.

