

Directions for Use

Light Cure Nano-Filler Reinforced Composite

Oxford Ceram NANO is a visible light cure nano-filler reinforced composite for anterior and posterior restorations. Beside its low shrink and low abrasion Oxford Ceram NANO shows improved mechanical properties. Oxford Ceram NANO is based on urethanedimethacrylate resin and inorganic filler particles <math><1.0 \mu\text{m}</math>. The total filler content is 82 % by weight and 74 % by volume.

Oxford Ceram NANO meets the requirements of **ISO 4049**.

Indications

Suitable for all cavities.

Contraindications

The placement of Oxford Ceram NANO is contraindicated

- If a dry working area or the recommended application technique are not possible
- If the patient is known to be allergic to any of the ingredients in Oxford Ceram NANO.

Side effects

Side effects are not known to date. In singular cases, Oxford Ceram NANO 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 protect pulp in deep cavities with a thin layer of calcium hydroxide liner.

Incompatibility with Other Materials

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

Application

1. Isolation

Rubber dam is the recommended method of isolation.

2. Color Matching

Clean the tooth with a fluoride-free polishing paste (e.g. flour of pumice with water) prior to preparation and color matching.

Ascertain the tooth shade while teeth are still moist and select the appropriate Oxford Ceram NANO shade.

Oxford Ceram NANO is shaded according to VITA®-Shades.

3. Cavity Preparation

After isolation prepare the cavity with minimal tooth reduction.

Deep excavations should be covered with a thin layer of a calciumhydroxid liner.

Areas next to the pulp should be optimally disinfected by photo activation (PAD).

Condition and apply a bonding agent according to the manufacturer instructions. The total etch technique with an etching gel (e.g. Oxford Etch) and subsequent application of a light cure bonding agent (e.g. Oxford Bond TE Mono) is recommended. Otherwise use a self etching bonding agent (e.g. Oxford Bond SE Mono) before application of Oxford Ceram NANO.

4. Application and Curing of Oxford Ceram NANO

Apply Oxford Ceram NANO in the selected shade. Oxford Ceram NANO is easy to model. Place it by using a suitable instrument. Transparent matrix strips may be used.

In case of deep and extended cavities best results are obtained with a build-up of a base liner using a light cure resin modified cement or a light cure flowable composite (e.g. Oxford Flow NANO), followed by the application of Oxford Ceram NANO.

In case of small cavities Oxford Ceram NANO can be applied directly.

For an optimum result apply Oxford Ceram NANO in **layers of max. 2 mm**. Light cure each increment separately.

By using a polymerization unit with a **light intensity of at least 1000mW/cm²**, cure each increment as follows:

Lighter shades (e.g. A1, A2, C2) **20 seconds**

Darker shades (e.g. A3.5, B3) **30 seconds**

5. Finishing

Contour with fine diamonds, stones or burs. Polish to high gloss with discs or rubber points. Interproximal finishing is accomplished by fine grit finishing strips.

Warnings

- Unpolymerized materials 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.
- Do not use any resin to adjust viscosity of composite restorative material.
- VITA® is a registered trade mark of the VITA-Zahnfabrik, Bad Säckingen, Germany.

Storage

Do not use after expiration date (expiration date see packaging).

Close syringe immediately after use.

Do not store above 25 °C (77 °F).

Warranty

First Scientific Dental Materials GmbH warrants this product will be free from defects in material and manufacture. First Scientific Dental Materials 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 First Scientific Dental Materials' sole obligation shall be repair or replacement of the First Scientific Dental Materials product.

Limitation of Liability

Except where prohibited by law, First Scientific Dental Materials 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!

Caution:

Federal law restricts the sale of this device to or by the order of a dentist.



Manufacturer:

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