EDGE FLOW

Nano-Hybrid Flowable Composite

HAMERZ MEDICAL

EDGE FLOW is a light curing, flowable, radiopaque composite which complies with the guidelines described in ISO4049:2019.

Composition

Monomer matrix:
Bis-GMA, BDDMA, DUDMA, CQ and other additives
Filler content:
Silica, glass ceramic

Indications

- Fissure sealing
- Extended Fissure sealing in molars and premolars
- Fillings in Black's class V cavities (cervical caries, eroded areas in roots, wedge-shaped defects)
- Minimally invasive fillings in Black's class III and IV cavities

Side effects

To prevent possible reactions of the pulp in cavities where the dentine is exposed, the pulp must be adequately protected (e.g. calcium hydroxide preparation). There have been no reports on serious side effects.

Contraindications / Interactions:

Unpolymerized Composite may cause skin allergies. The user must take adequate precautions (e.g. wearing gloves). Should the operator or patient be known to be allergic to one of the constituents listed under "Composition", do not use this material.

Interaction with other substances

As phenolic substances (such as eugenol) inhibit polymerization, do not use cavity liners containing such substances. Discoloration may occur upon using chlorhexidine or oral liquids.

Application Pretreatment

Preparatory measures
Before commencing the treatment, clean the tooth with non-fluoride polishing paste. Use a Vita® shade guide to select the shade while the tooth is still moist.

1. Cavity preparation
Prepare the cavity minimally invasive as generally required for adhesive techniques. All enamel margins in the anterior region must be beveled. Do not bevel the margins in the posterior region and avoid slice preparations. Spray the cavity with water to clean it, remove all debris, and dry it. The cavity must be isolated. It is advisable to place a rubber dam.

2. Pulp protection / Cavity liner
If an enamel-dentine adhesive is used, no cavity liner is required. In very deep cavities, those areas in close proximity to the pulp, must be coated with a calcium hydroxide material.

3. Approximal contact areas
For cavities with approximal sections, place a transparent matrix and fix it in place.

4. Etching with an etching agent
Apply an etching agent first to the enamel areas of the cavity and let it take effect for 30 sec. Then, fill the whole cavity with etching gel and let it take effect for a further 15 sec. The etching time in the dentine should not exceed 20 sec. Then, rinse the cavity thoroughly with water spray and dry it with oil-free compressed air.
Do not overdry the dentine. After drying, the etched surfaces of the enamel appear chalky/white and must not be contaminated prior to applying the bonding agent. Should they be contaminated with saliva, rinse and dry them again - re-etch if necessary.

5. Applying the bonding agent (e.g. EDGE Bond)
Refer to the bond instructions for details.

6. Applying EDGE FLOW
Place thin layers (max. 2 mm) of EDGE FLOW directly into the cavity using the curved application tips supplied with the material - for hygienic reasons, they are for single-use only. When applying the material with the tip, ensure that no air bubbles become entrapped. Ensure that the prepared tooth surfaces are wetted thoroughly. Light cure each layer with a light curing device for 40 sec, holding the light guide as close as possible to the surface. The light curing device should be set to the power and the light intensity of 500 mW/cm² and 450 nm, respectively. A dispersion layer, a thin, non-polymerized film, remains on the surface after curing due to the effect of the oxygen in the air. It must not be touched or removed.

7. Trimming
EDGE FLOW can be trimmed and polished immediately after curing using finishing diamonds, flexible discs, silicone polishers and polishing brushes.

Please note

- When placing time-consuming restorations, to prevent the composite from curing prematurely, the dental light should be moved away from the site temporarily or the composite covered with foil impervious to light.
- For hygienic reasons, the curved application tips supplied with the material must only be used once!
- Use a light curing unit with an emission spectrum of 450 nm for curing this material. As the required physical properties can only be achieved if the lamp is functioning correctly, its luminous intensity must be checked regularly as described by the manufacturer.
- Prevent contact of the material with skin. In case of contact, wash the skin with water and soap.
- Prevent contact of material with eyes. In case of contact, wash the eyes with plenty of water and refer to a medical center.

Storage / Cautions

Store at 10-25°C - Avoid direct sunlight - Close the cap tightly immediately after use - The material should be kept in the room temperature for 15 min before use - Retract the plunger of the syringe slightly to prevent the apertures becoming blocked - Do not use after the expiry date (refer to the label on the syringe) - For use by dentists only - Keep out of reach of children - This product was developed specifically for the described range of applications - It must be used as described in the instruction - The manufacturer is not liable for damages caused by handling or processing the material incorrectly.

Shelf life

Shelf life of the material is 3 years. Do not use after the expiry date.

Discard

The material must be discarded as a hazardous material.