

ENGLISH

Product Description

3M™ Filtek One Bulk Fill Restorative is a visible-light activated, restorative composite optimized to create fast and easy restorations. This material provides excellent strength and low wear for durability and improved aesthetics. The material can be placed and cured up to 5 mm deep, enabled by a stress relieving system and optimized optical properties. Filtek One Bulk Fill Restorative is designed to enhance the use of a bulk fill composite materials by reducing the assembly time of a bulk fill restoration. It can be used in Class II posterior and anterior restorations. Filtek One Bulk Fill Restorative is offered in a range of tooth-colored shades. All shades are radiopaque. The fillers are a combination of a non-agglomerated/non-aggregated 4 to 11 nm silica filler, an aggregated zirconia/silica cluster filler (trifurcated comprised of 4 agglomerate 100 nm particles), and a teflon-like cluster filler consisting of agglomerate 100 nm particles. The inorganic filler loading is 76%. Filtek One Bulk Fill Restorative contains AUDMA, AFM, diurethane-DMA and 1,12-dodecanecarboxylic acid. Filtek One Bulk Fill Restorative is applied to the tooth following use of a methylacrylate-based dental adhesive, such as manufactured by 3M, which permanently bonds the restoration to the tooth structure. Filtek One Bulk Fill Restorative is packaged in single-dose capsules and syringes.

General Information

3M Filtek One Bulk Fill Restorative complies with ISO 4049: Polymer-Based Dental Restorative. Material classified as a Type 1 and Class 2 material. It also complies with ISO 8674: Class 2 Light Cure Pit and Fissure Sealant.

All shades are radiopaque, with a value of 3.1 mm of aluminum. Aluminum has a radio-opacity equivalent to that of dentine. Thus 1 mm of material having a radio-opacity equivalent to 1 mm of aluminum has a radio-opacity equivalent to that of dentine and 2 mm of aluminum is equivalent to enamel.

Intended Use: A dental composite resin for anterior and posterior restorations.

Indications for Use

Filtek One Bulk Fill Restorative is indicated for use in:

- Direct anterior and posterior restorations (including occlusal surfaces)
- Base/liner under direct restorations
- Core build-ups
- Splinting
- Indirect restorations including inlays, onlays and veneers
- Restorations of deciduous teeth
- Extended fissure sealing in molars and premolars
- Repair of defects in porcelain restorations, enamel, and temporaries

Contraindications

None

Intended Users

Educated dental professionals, i.e. general dentists, dental assistants/hygienists, who have theoretical and practical knowledge on usage of dental products.

Intended Patient Population

Intended Patient Population includes children, teens and adults as recommended by a Dentist unless the patient condition, such as a known allergy to the device limits the use.

Clinical benefit

Restoration of oral esthetics and function.

Precautions and Warnings

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.

For Dental Personnel

Capsules may be warmed (Do not warm syringes).

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 a skin contact occurs, wash skin with soap and water. Use of protective gloves and a no-touch technique is recommended. Acrylates may penetrate commonly used gloves. If product contacts 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.

3M SDS information can be obtained from 3M.com/dental or contact your local subsidiary.

Instructions for Use

Preparation

1. Prophy: Teeth should be cleaned with pumice and water to remove surface stains.

2. Shade Selection: Prior to isolation of tooth, select the appropriate shade(s) of Filtek One Bulk Fill Restorative using a standard VITAPAN® classical shade guide.

3. Isolation: A rubber dam is the preferred method of isolation. Cotton rolls and an evacuator can also be used.

Directions

Direct Restorations

4. Cavity Preparation:

- 4.1 Anterior restorations: Use conventional cavity preparations for all Class III, IV and V restorations.
- 4.2 Posterior restorations: Prepare the cavity. Line and point angles should be prepared to prevent any bond to other base material should it be left in the internal form of the preparation that would interfere with light transmission and therefore, the hardening of the restorative material.

Placement of Matrix:

5.1 Anterior restorations: Mylar strips and crown forms may be used to minimize the amount of material used.

5.2 Posterior restorations: Place a thin dead-soft metal, or a pre-contoured mylar or a pre-contoured-metal matrix band and insert wedges firmly. Furnish the matrix band to establish proximal contact and contact area. Adapt the band to seal the gingival area to avoid overhangs.

Note: The matrix may be placed following the enamel etching and adhesive application steps if preferred.

6. Pulp protection: If a pulp exposure has occurred and the situation warrants a direct pulp capping procedure, use a minimum amount of calcium hydroxide on the exposure followed by an application of 3M™ Vitrebond™ or Vitrebond Plus™ Light Cure Glass Ionomer. Vitrebond or Vitrebond Plus liners/base may be used in the form of deep cavity excavation.

7. Adhesive System: To bond Filtek One Bulk Fill Restorative to tooth structure use of a 3M™ dental adhesive system is recommended. Refer to adhesive system product instructions for full instructions and precautions for the products. After curing the adhesive, continue to maintain isolation from blood or saliva until further treatment is performed.

Note: Follow the adhesive system instructions for use for recommended silane treatment and repair of ceramic restorations, followed by the adhesive application.

8. Delivery:

Dispensing the Composite:

8.1 Syringe: Dispense the necessary amount of restorative material from the syringe into the mix tip by turning the handle slowly in a clockwise manner. To prevent coining of restorative when dispensing is completed, turn the handle counter-clockwise a half to stop paste flow. Immediately replace syringe cap. If not used immediately, the material should be protected from light.

Single-Dose Capsule:

Insert capsule into the 3M™ Restorative Dispenser. Refer to separate restorative dispenser instructions for full instruction and precautions. Extrude restorative directly into cavity.

9. Placement:

9.1 Avoid intense light in the working field. Exposure of paste to intense light may cause premature polymerization.

9.2 Capsule: Start dispensing in the deepest portion of the preparation, holding the tip close to the preparation surface. Withdraw the capsule tip slowly as the cavity is filled, and avoid lifting the tip out of dispensed material while dispensing, to reduce voids. When dispensing has been completed, drag the capsule tip against the cavity wall while withdrawing the matrix to aid material flow into the proximal box.

9.3 Slightly overfill the cavity to permit extension of composite beyond cavity margins. Contour and shape with appropriate composite instruments.

10. Curing: This product is intended to be cured by exposure to a high-intensity visible light source, such as a 3M curing light. Hold the light guide tip as close to the restorative as possible during light exposure. Use light curve chart to determine appropriate cure times and conditions for all shades.

| Indication | Increment | Depth | All halogen or LED lights (with output of 550-1000 mW/cm²) | LED lights (with output 1000-2000 mW/cm²) |
|---|-----------|--|--|---|
| Core Build-Up and Class II Direct Restorations | 5 mm | 20 sec occlusal, 20 sec buccal, 20 sec lingual | 10 sec occlusal, 10 sec buccal, 10 sec lingual | |
| All indications listed (except Core Build-Up and deeper Class II Direct Restorations) | 4 mm | 40 sec | 20 sec | |
| Anterior or shallow Class I restorations | ≤ 3 mm | 20 sec | 10 sec | |

Note: For Class II restorations, remove the matrix band prior to the buccal and lingual curing steps.

11. Contouring: Contour restoration surfaces with fine finishing diamonds, burs or stones. Contour proximal surfaces with 3M™ Sof-Lex™ Finishing Strips.

12. Adjust Occlusion: Check occlusion with a thin articulating paper. Examine centric and lateral excursion contacts. Carefully adjust occlusion by removing material with a fine polishing diamond or stone.

13. Finish and Polishing: Polish with the 3M™ Sof-Lex™ Finishing and Polishing System.

14. Direct Operatory Procedure

1.1 Shade selection: Choose the most appropriate shade(s) of Filtek One Bulk Fill Restorative prior to isolation.

1.2 Preparation: Prepare the tooth.

1.3 Impressioning: After preparation is complete, make an impression of the prepared tooth by following the manufacturer's instructions of the impressioning material chosen. An impressioning material, such as manufactured by 3M, may be used.

2. Laboratory Procedure

2.1 Pour the impression of the preparation with die stone. Place pins at the preparation site at this time if a "triple tray" type of impression was used.

2.2 Separate the cast from the impression after 45 to 60 minutes. Place pins in die and base, then cast as for a typical crown and bridge procedure. Mount or articulate the cast to its counter model on an adequate articulator.

2.3 If a second impression was not sent, pour a second cast using the same impression registration. This is to be used as a working cast.

2.4 Section out the preparation with a laboratory saw and trim away excess or, expose the margins so that they can be easily worked. Mark the margins with a red pencil if needed. Add a spacer at this time if one is required.

2.5 Soak the die in water, then with a brush, apply a very thin coating of separating medium to the preparation, let it dry somewhat, and then add another layer.

2.6 Add the first increment of composite to the floor of the preparation, stay short of the margins, and follow the cure recommendations described in the Direct Restoration section (Step 10).

2.7 Place and cure additional increments of composite. Allow for the last increment in a second die.

2.8 Place the die back into the articulated arch. Add the last increment of composite to the occlusal surface. Overfill very slightly, distally, and occlusally. This will allow for the mesiodistal contacts and the proper occlusal contact when the opposing arch is brought into occlusion with the uncuried increment. Light cure for only ten seconds, then remove the die to prevent adhesion to adjacent surfaces. Finish the curing process following the cure time in the Direct Restoration section (Step 10).

2.9 With the occlusal contacts already established, begin removing the excess composite from around the points of contact. Develop the incisal and ridges as per remaining occlusal anatomy.

2.10 Care must be taken when removing the prosthesis from the die. Break off small amounts of the die from around the restoration, the die should break away cleanly from the cured restoration, until all of the restoration is recovered.

2.11 Using the master die, check the restoration for finish, undercuts, and fit. Adjust as necessary, and then polish as noted above in Direct Restorative steps 11-13.

3. Dental Operatory Procedure

3.1 Roughen the interior surfaces of the indirect restoration.

3.2 Clean the prosthesis in a soap solution in an ultrasound bath and rinse thoroughly.

3.3 Cementation: Cement the prosthesis using a 3M™ resin cement system.

Storage Conditions

1. This product is designed to be stored at room temperature. If desired, the product may be warmed in a commercial warmer prior to use (no higher than 70°C/158°F, no longer than 1 hour); for capsules only.

2. The product is best stored at room temperature. If stored in cooler allow product to reach room temperature prior to use. Shelf life at room temperature is 36 months. Ambient temperatures routinely higher than 27°C/80°F may reduce shelf life. See outer package for expiration date.

3. Do not expose restorative materials to intense light.

4. Do not store materials in proximity to eugenol containing products.

Handling after Use

The multiple use syringe is not intended for direct patient contact. Use clean gloves when handling the syringe. Directions for cleaning and low-level disinfection of the syringe are provided below.

Step 1 (Cleaning):

Use a CaviWipes™ or equivalent cleaning wipe, and wipe the entire surface of the device thoroughly for at least 30 seconds and until no visible soil remains on the device.

Step 2 (Disinfecting):

Use a CaviWipes™, or equivalent alcohol-butylamine ammonium disinfectant wipe, to disinfect the entire surface of the device by keeping wet for the contact time listed on the disinfectant label.

Step 3 (Storage):

Store in a cool dry place, away from heat and moisture.

Step 4 (Delivery):

Dispensing the Composite:

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To prevent coining of restorative when dispensing is completed, turn the handle counter-clockwise a half to stop paste flow.

Immediately replace syringe cap. If not used immediately, the material should be protected from light.

8.2 Single-Dose Capsule: Insert capsule into the 3M™ Restorative Dispenser. Refer to separate restorative dispenser instructions for full instruction and precautions. Extrude restorative directly into cavity.

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When dispensing has been completed, drag the capsule tip against the cavity wall while withdrawing the matrix to aid material flow into the proximal box.

9.3 Slightly overfill the cavity to permit extension of composite beyond cavity margins. Contour and shape with appropriate composite instruments.

10. Curing: This product is intended to be cured by exposure to a high-intensity visible light source, such as a 3M curing light. Hold the light guide tip as close to the restorative as possible during light exposure.

Use light curve chart to determine appropriate cure times and conditions for all shades.

Symbol Glossary

Symbol Title

Symbol

Description and Reference

Manufacturer

MD

Indicates the medical device manufacturer. Source: ISO 15223, 5.1.1

Date of manufacture

REF

Indicates the date when the medical device was manufactured. Source: ISO 15223, 5.1.4

Use-by date

LOT

Indicates the date after which the medical device is not to be used. Source: ISO 15223, 5.1.4

Batch code

REF

Indicates the manufacturer's batch code so that the batch or lot can be identified. Source: ISO 15223, 5.1.5

Catalogue number

REF

