

Geristore is a fluoride-releasing, radiopaque, hydrophilic, restorative material. Geristore's physical properties include low cure shrinkage, low coefficient of thermal expansion, and high strength. The material aggressively bonds to dentin, enamel, composite, porcelain, and metal, including stainless steel. The dual-cure formulation assures the integrity of the restoration in areas difficult to light-cure.

**CAUTION:** Wear protective gloves while using this product.

**CAUTION:** Wear eye protection while using this product.

CAUTION: Geristore has not been studied in children, pregnant or breast-feeding women.

## **DIRECT RESTORATIONS**

**Note:** Remove Geristore Syringeable from the refrigerator about 30 minutes before needed.

- 1. Clean tooth surface(s) thoroughly.
- 2. Prepare the tooth surface according to the type of surface you will be bonding to:
  - a. DENTIN and ENAMEL: For maximum bond strengths, the Tenure® Multi-Purpose Bonding System should be applied prior to Geristore.
  - b. COMPOSITE/METAL: Roughen surface with diamond or sandblaster. Thoroughly wash and air-dry. Apply Dry Bond to degrease and assure that there is a clean, dry surface.
- 3. Prepare the auto-mix syringe:
  - a. Align the straight edge of the auto-mixing housing with the syringe flange.
  - b. Push the mixing tip onto the syringe and turn 90° clockwise until it stops.
  - c. Attach the intraoral tip firmly.

**Note:** You must extrude a pea-sized amount of material after placing the mixing tip on the syringe — discard this material. This is critical to ensure that Geristore Syringeable sets properly. Repeat this each time a mixing tip is placed on the syringe.

4. Dispense Geristore onto the area to be restored.

**Note:** Material will reach final cure in 3-4 minutes from the time dispensed. The working time is  $1\frac{1}{2}$ -2 minutes unless the material is light-cured. To determine the correct curing times for your curing light(s), we recommend that you use the curing rings provided.

Finishing: For esthetic areas, apply a thin layer of Virtuoso® Flowable Clear (No.030381827).
Finish with 12 or 30 fluted bur and polish.

# **BASE AND LINER**

- 1. Apply the Geristore® mixture to dentin surfaces and light-cure.
- Complete the restoration with Virtuoso Universal Composite or take an impression for an indirect restorative. Geristore is compatible with any Bis-GMA-based restorative.

# **CEMENTING INDIRECT RESTORATIONS**

(Metal and PFM Crowns, Inlays, Onlays, Bridges)

Geristore can also be used to cement metal and PFM crowns, bridges, inlays, and onlays. Seat the restoration and remove the excess material at the gel stage.

**Note:** For Maryland Bridges and other restorations with little or no mechanical retention, we recommend applying the Tenure® Multi-Purpose Bonding System to dentin or enamel prior to the application of Geristore.

- Using a plastic instrument, coat tooth surface(s) and prepared bonding surface of indirect restorative with the Geristore mixture. Seat the restorative, noting excess Geristore escaping from all margins.
- Take care not to disturb the restoration. Remove the excess after gel time (approximately 2 minutes) but before final cure (3-4 minutes from time of mix).
- 3. After the final set (approximately 3-4 minutes), finish the margins with a fine diamond or 12 or 30 fluted bur.

## **ORTHODONTIC APPLIANCES**

- 1. For brackets, etch the teeth and apply Tenure Multi-Purpose Bonding System (No. 031146000) to the enamel. Coat the Geristore mixture onto the bracket and seat the bracket. Remove excess material with a sable brush dipped in Tenure S (No. 031145100).
- For bands, apply Tenure to the inside surface of the band and to the enamel. Coat the inside surface of the band and tooth with the Geristore mixture and slide the band into place. Remove excess with a sable brush dipped in Tenure S. Geristore is compatible with any esthetic orthodontic hardware (porcelain, acrylic, or plastic).
- 3. Light-cure the brackets or bands.

Due to variations in the performance characteristics of light curing units, ALWAYS bench test restorative materials before use in vivo.

- a. Using standard 2 mm curing test rings, fill the well of the test ring and level material.
- b. Position the light transmitting element perpendicular to and approximately 2 mm-5 mm above the top surface of the ring.
  - With Sapphire® PAC lights (all models) start with 5-second exposures.
  - With Flashlite® LED lights (all models) start with 10-second exposures.
  - For all other curing lights; halogen, LED and other, refer to the manufacturer instructions.
    - A minimum of 10-30 seconds is recommended.
- c. Use a dental probe to scrape test the hardness of the top and bottom surfaces. The bottom surface should be as hard as the top surface.
- d. If the bottom surface is not completely cured, repeat steps (b) to (c). Repeat until the bottom surface is completely cured.
- e. Maintain a log including material, shade and associated curing exposure time. Use the log to monitor system performance.

**Note:** If a cavity preparation is deep, curing exposure times must also be increased due to beam divergence and angular placement of the light transmitting element to the restoration. An incremental filling technique is recommended and each increment should be fully cured prior to applying additional layers.

# General guidelines for curing light unit exposure times.

See manufacturer's instructions. ALWAYS bench test restorative materials before use in vivo.

- Curing lights with power density greater than 800 mW/cm2. Cure the buccal and lingual with 10-second exposures for each area.
- Curing lights with power density less than 800 mW/cm2. Cure the buccal and lingual for 20-second exposures for each area.
- Curing lights with power density less than 300 mW/cm2 should not be used to cure.

# **STORAGE**

Do not freeze.

**Do not** expose to direct sunlight.

**Do not** expose to temperatures exceeding 77° F (25° C).

Refrigerate for maximum shelf life.

Return to room temperature prior to use.

# **RELATED DENMAT PRODUCTS**

Description	Part Number
Tenure® Uni-Bond® with Gloss-N-Seal®	030411900
Tenure Multi-Purpose Bonding System	031146000
Virtuoso® Flowable Custom 15 Shade Kit	030381800
Tenure S Value Kit	031145100
Virtuoso Universal Intro Kit	030381950
Sapphire® Plus Plasma Arc Curing Light	033968000
Flashlite® Magna 4.0 LED Curing Light	CR1079

# LIMITED WARRANTY

DenMat will replace or refund the purchase price of any of its products that are proven to be defective within 30 days of the purchase date. Replacement of defective goods, or refund of the purchase price, shall be the exclusive remedy for the user. DenMat will not be liable for any economic, incidental, or consequential loss or damage that arises out of the use of, or the inability to use its products.

This limited warranty is in lieu of all other warranties, expressed or implied, and shall be void if the product is improperly stored or used. There are no implied warranties of merchantability, fitness for a particular purpose, or otherwise. Before using this product, the user shall determine whether it is suitable for the intended use and the user shall assume all risk and liability associated therewith.

# **DENMAT CUSTOMER SUPPORT**