### Technical Bulletin Instructions

Made In U.S.A

## **PEARL**

# **Auto-Mix System**

Pearl is a self cure, filled permanent cement designed for: cementing conventional cast restorations on most vital and non-vital teeth, cementing bonded bridges of both cast and etched (Maryland) and perforated base (Rochette) types. It is also suitable for cementing prefabricated laminate veneers, ceramic crowns, inlays, onlays, cementation of pins, posts, and periodontal splinting.

#### KIT CONTAINS

30 g of Adhesive in Auto-Mix Cartridges Accessories and Instructions

#### **OUTSTANDING FEATURES OF THE MATERIAL**

- Convenient, easy to apply; 90 seconds working time, 210 seconds setting time.
- High Mechanical Strength; Compressive strength 215 MPa, Diametral Tensile strength 42 MPa.
- Versatile.
- Excellent biological and chemical resistance to oral environment.
- Good reproducibility and control of working time.
- Long shelf life.

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#### **INSTRUCTIONS**

#### PREPARATION FOR BONDING

#### A. Conventional Cast Restorations

- 1. Micro blasting of the internal surface of the casting with 25-micron Aluminum Oxide is recommended in order to create a clean surface with irregularities to provide additional retention. Using an ultrasonic cleaner or scrubbing with a clean toothbrush under running water can remove residual Aluminum Oxide. Disinfect casting and rinse thoroughly with water.
- 2. In order to assure best seal and retention, the preparation should be cleaned of all residues of temporary cement as scrupulously as possible.
- 3. Clean with a pumice slurry that does not include oils or fluoride.

#### a. Non-Vital Teeth.

Apply etching agent with a dabbing motion to the prepared tooth surface for 60 seconds. Rinse and dry thoroughly with oil-free air. Apply enamel and dentin bonding system of your choice.

#### b. Vital Teeth.

Prepared tooth surfaces should be clean and dry. Deep areas of the preparation may require application of Calcium Hydroxide liner. Apply enamel and dentin bonding system of your choice.

#### **B.** Maryland and Rochette Bridges

The abutment teeth must be cleaned with a pumice slurry that does not include oils or fluoride. The enamel surface to be bonded should be etched with Enamel Conditioner using dabbing motion for 90 seconds. Rinse the teeth with copious amounts of water for a minimum of 60 seconds and then dry with clean, warm air. Use enamel and bonding system of your choice to prepare teeth for bonding.

CAUTION: It is important not to touch the etched surface of the Maryland Bridge restoration. The contaminated etched surface can be cleaned with chloroform or acetone. Place mylar matrix strips on proximating teeth to avoid bonding them to the bridge.

### C. Ceramic Crowns, Prefabricated Laminate Veneers, Inlays and Onlays

When bonding to etched porcelain or glass, the use of Porcelain Conditioner is recommended. Apply a thin layer of Saline Porcelain Conditioner to the surfaces to be bonded, and blow-dry for 30 seconds. This will enhance the bond between the restoration and the cement. Surfaces of the restoration prepared for bonding must be thoroughly clean. If contamination occurs, they should be washed in absolute alcohol, dried and re-treated with Porcelain Conditioner before bonding. (Order Porcelain Conditioner from Dent Zar).

#### **CEMENTING**

- 1. Remove the closure cap from the cartridge (<u>Do Not Re-Use The Cap!</u>). Install the mixing tip onto the cartridge and extrude the needed amount of material. <u>After Each Use Leave The Used Mixing Tip In Place To Seal The Cartridge</u>. The initial extrusion from mixing tip (about the size of a pea should be discarded.) The following mixture will be perfect. This must be done with each new mixture.
- 2. If a longer working time is required refrigerate the material prior to use, or dispense the mix on a cold glass slab.
- 3. Place a sufficient quality of the mixture on the restoration. Make certain that all the surfaces are covered with cement. Place a small amount of the cement in the gingival aspects of the preparation and immediately follow with the placement of the restoration.
- 4. Hold the restoration under constant pressure for 90 seconds; keep the moisture away from the cemented restoration during this period.
- 5. Remove excess cement from the margins with a carver or scaler prior to onset of initial set (gel stage). Once initial set has begun, do not attempt to remove excess cement as the material may be pulled from under the margins. The cement will fully harden in three minutes.

#### **STORAGE**

The performance of the material is guaranteed for two years from the date of manufacture if stored at room temperature. Refrigeration will prolong the shelf life.

All components and accessories are available separately

Revision #2. Revised on 1-5-15

#### Material Safety Data Sheet May be use to comply with U.S. Department of Labor OSHA'S Hazard Communication Standard 29 CFR Occupational Safety and Health Administration 1910.1200, Standard must be consulted for specific (Non-Mandatory Form) requirements Form Approved OMB No. 1218-0072 Identity (as Used on Label and List) Pearl-Crown and Bridge Cement. Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that Section I Emergency Telephone Number: 800-444-1241 or 818-8573010 Dent Zar Inc. 22156 Sherman Way, Unit B Telephone Number for Information: 800-444-1241 or 818-8573010 Canoga Park, CA 91303, USA Date Prepared: 06-17-97 Signature of Preparer (Optional) Section II - Hazardous Ingredients/Identity Information Other Limits Hazardous Components (Specific Chemical Identity: Common Name(s) OSHA PEL ACGH TLV Recommend %(optional) SILICON DIOXIDE BARIUM GLASS **METHACRYLATE** MONOMERS BENZOYL PEROXIDE ORGANO TERTIARY AMINE ALUMINUM OXIDE Section III - Physical/Chemical Characteristics Specific Gravity (H20=1) N/A Boiling Point Vapor Pressure (mm Hg) Melting Point Vapor Density (AIR=1) Solubility in Water N/A Evaporation Rate (Butyl/Acetate=1) N/A NOT SOLUBLE Appearance and Odor TINTED PASTE WITH CHARACTERISTIC ODOR Section IV - Fire and Explosion Data Flash Point (Method Used) N/A Flammable Limits N/A Extinguishing Media CHEMICAL FOAM, CARBON DIOXIDE, OR DRY CHEMICAL U EL N/A Special Fire Fighting Procedure NONE Unusual Fire and Explosion Hazards NOT KNOWN AS TO DATE Section V - Reactivity Data Stability Unstable ( ) Stable ( X ) Conditions to Avoid EXTREME HEAT, SUN LIGHT OR VISIBLE LIGHT (Materials to Avoid) AVOID CONTAMINATION FOR BASE PASTE AND AMINE CONTAMINATION FOR Incompatibility CATALYST PASTE Hazardous Decomposition or By products Hazardous May Occur Conditions to Avoid EXTREME HEAT, EXPOSURE TO LIGHT. Will Not Occur ( Polymerization Section VI - Health Hazard Data Route (s) of Entry Inhalation? YES Skin? YES Ingestion? YES Health Hazards (Acute and Chronic) MAY OCCUR IN ALLERGIC PEOPLE OR OVEREXPOSED PEOPLE CARCINOGENICITY ARC Monographs? OSHA Regulated? No carcinogens present Signs and Symptoms of Exposure Medical Conditions Generally NOT KNOWN Aggravated by Exposure Emergency and First Aid Procedures y and this rad floordules SKIN CONTACT: WASH OFF WITH SOAP AND PLENTY OF WATER IMMEDIATELY EYE CONTACT: FLUSH PROMPTLY WITH COPIOUS AMOUNT OF WATER FOR A LEAST 15 MINUTES AND SEE **PHYSICIAN** INGESTION: SEE PHYSICIAN PROMPTLY. Section VII - Precautions for Sate Handling and Use CLEAN USING GLOVES AND DISPOSE IN AN APPROVED MANNER. Steps to be taken in case Material is Released or Spilled AVOID BREATHING VAPORS. VENTILATE AREA. Waste Disposal Method DISPOSE IN CCORDENCE TO LOCAL, STATE AND FEDERAL Precautions to be taken in handling and storing AVOID CONTACT WITH SKIN, TISSUE, GUMS AND EYES KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. Section VIII - Control Measures Respiration Protection GENERALLY NOT NECESSARY (specify type) Local Exhaust RECOMMENDED Ventilation Special NONE Mechanical (General) NONE Other RECOMMENDED RECOMMENDED Other Protective Clothing or Equipment

Work/Hygienic Precaution NORMAL SAFE PRACTICES. USE ONLY IN A HIGHLY PROFESSIONAL MANNER.

The information contained herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty either expressed or implied is made for the completeness or accuracy of this information.