

COSMEDENTRenamel®
MicrofillLIGHT-CURED
MICROFILL COMPOSITE

INSTRUCTIONS FOR USE

www.cosmedent.com
800.621.6729**GENERAL****CHARACTERISTICS**

Renamel® Microfill is the only composite that truly mimics the enamel surface. Where enamel is to be replicated, **Renamel® Microfill** is the composite resin of choice. **Renamel® Microfill** has been and continues to be the number one rated microfill for more than 2 decades. When applied, sculpted, finished and polished accurately, no other composite resin can match its lifelike, natural appearance. In essence, it is the artistic dentist's dream material.

DESCRIPTION

Renamel® Microfill is a light-cured, microfilled, highly polishable dental filling material according to EN ISO 4049. **Renamel® Microfill** cures with a LED and Halogen light with a light intensity more than 500mW/cm² at wavelength range of 400 - 500 nm. **Renamel® Microfill** has a compressive strength of >320 MPa, flexural strength of > 80 MPa and 2 mm depth of cure.

CREATING AN ENAMEL-LIKE SURFACE

Renamel® Microfill is a pure microfill, and as such can be polished as

highly as glass. Using the appropriate instruments, a dentist can shape and texture the surface to exactly duplicate the surrounding dentition. This step should not be taken lightly, for this is the part that gives you the ultimate in esthetic dentistry. **Renamel® Microfill** has the best refractive and reflective index of any product in the marketplace. When finished and polished properly, **Renamel® Microfill** will create results that are so beautiful and long-lasting, that both the dentist and the patient will be astounded.

COMPOSITION

Renamel® Microfill consists of multi-functional acrylic resins and fillers of 0.04 - 0.2 micron sized particles of inorganic and pre-polymerized composite (70% by weight, 60% by volume). **Renamel® Microfill** has been in the marketplace for more than twenty-five years, and its handling, color stability, and long term polishability is unsurpassed.

LONG-TERM COLOR STABILITY

Renamel® composites offer color stability that is unmatched in the

marketplace. **Renamel® Microfill** holds its shade and polish so that you can rest assured that your patient will be happy for many years.

INDICATIONS FOR USE

- Direct anterior veneers
- Top layer of Class I and II restorations
- Anterior Class III and IV restorations
- Class V restorations (cervical caries, root erosion, wedge-shaped defects)
- Closing of diastemas
- Repair of composite and ceramic veneers
- Reshape, lengthen and restoratively reposition anterior teeth

DISPENSING COMPOSITE MATERIAL
Syringe delivery:

- Extrude composite onto a mixing pad by turning the handle slowly in a clockwise manner. Slice an increment of proper size with a sterile instrument onto a mixing pad.
- Immediately replace syringe cap to prevent polymerization. If the extruded material is not used right away, cover the composite with a light protecting box such as our **ResinKeeper™**.

Unit Dose Delivery:

- Insert unit dose into dispensing gun and

dispense composite material. Dispose of unit dose after use.

PLACEMENT DIRECTIONS

Prior to the application of **Renamel® Microfill**, the use of opaques or microhybrids, or a combination of both may be necessary to achieve excessive color blackout. If replacing dentin, place a micro-hybrid or nanofill composite first for strength and opacity. Polymerize before the addition of your microfill layer.

- 1** Prepare tooth, etch and dry according to manufacturer's instructions.
- 2** Place dental adhesive of choice, such as **Cosmedent's Complete™**, and polymerize.
- 3** **Renamel Microfill** should be placed on a lightprotecting box, such as the **ResinKeeper™**, to prevent pre-polymerization by ambient light. Slice an increment of proper size and roll the composite into a ball, a cylinder or an elliptical shape (convenience form) as needed.
- 4** Place with a clean metal instrument onto the area to be restored and shaped. **Cosmedent's 8A and 8AL** (long and short bladed) and G-3 are excellent instruments for placement. **Note:** For instrumentation, titanium-coated composite instruments are desired because they will prevent composite material from sticking to the instrument.
- 5** If resin still sticks to the instrument, the instrument may be scratched or dirty. If your room is excessively warm and some stickiness occurs, simply wipe the instrument with a light alcohol swab and this will reduce stickiness completely.
- 6** Take your time and sculpt carefully. Slightly overcontour every restoration, except in the interproximal areas. Sculpt exactly to contour in these areas and it will greatly aid in developing the final contour of your restoration, and shorten your finishing and polishing time. **Cosmedent's IPC** instruments are

excellent for interproximal sculpting.

- 7** If placing an incisal shade, the use of a titaniumcoated instrument, such as **Cosmedent's Multi-Purpose** instrument, will help you create incisal lobes and grooves in your body composite to make room for the application of your incisal shade.
- 8** Polymerize each surface for 20-40 seconds (Halogen or LED Lamp) and final cure each restoration on all surfaces for 60 seconds. Do not try to cure to depths over 2 mm. **Note:** Dentists tend to under-cure composites. You will get best results if you slightly over-cure.
- 9** Finishing should be done with a combination of polishing materials such as diamonds, carbide burs and aluminum oxide discs in coarse and medium grits (**FlexiDiscs®** from **Cosmedent**).
- 10** High-gloss polish can be achieved using aluminum impregnated instruments fine and

superfine flexible discs (**FlexiDiscs™**) and (**FlexiCups**), followed by **Enamelize™** polishing paste applied with (**FlexiBuffs®**) all from **Cosmedent**.

For more detailed polishing techniques, please visit **Cosmedent's Learning Center** at Cosmedent.com/Learning_Center or call a **Cosmedent Customer Care Representative** at **800.621.6729**.

COLOR MATCHING

Is there anything more difficult than matching a tooth shade against an existing dentition? The **Renamel® Restorative System®** is designed to take the guesswork out of shade selection. It recognizes that there are different zones of color and translucency. It understands that color selection should be about achieving the correct enamel shade with predictability. **Cosmedent's Renamel® Restorative System** will help you easily achieve consistently reliable results when selecting a shade.

Color matching is a difficult science, and many people have trouble with color selection.



What are the problems?

- Many materials on the market do not match their shade guides.
- It is often difficult for an individual to see shade differences.
- The color, opacity, translucency and polishability of many materials do not accurately simulate the tooth surface.
- Materials often have a refractive and reflective index that is dissimilar to that of the enamel surface.
- Many materials do not have long-term color stability which can result in large color changes over time.

Cosmedent has consistently developed reliable and color stable materials that accurately match each other and the Classic VITA® Shade Guide.

Renamel® composites have been matched to VITA® shades more accurately than any other material in the marketplace. The 16 different shades in the VITA® shade guide encompass four shade ranges. Cosmedent has added several additional visible shades to give the clinician still more options to develop the correct color.

These shades include some darker geriatric shades for cervical restorations (A5, A6, and C5) and SuperBrite shades (SB1, SB2, and SB3) to match intensely bleached teeth, or to create the Hollywood smile. This system is also complimented by unique half shades of A1.5, A2.5, and A3.5, which are commonly missing in other systems. The **Renamel® Restorative System** also contains three vividly translucent incisal shades: light, medium and dark.

SHADE SELECTION

When selecting a shade, one should remember that teeth are usually polychromatic, having three zones: a translucent darker incisal, a lighter central body portion and a darker cervical area. Assessing shade on a clean, moist tooth using magnification will help you to easily identify these areas.

The body shades in the **Renamel® Restorative System** correspond to the central body zone of the tooth surface. Primary shade selection should be taken against the body area of the tooth. A good suggestion is to remove the

incisal and gingival portion on each shade tab which may help you achieve a more accurate match to the body area. You can also make your own shade guide out of composite material.

Some additional hints on shade selection are:

- Understand how light affects the overall aspect of your shade selection. Assess shade in fluorescent light (where we view one another most of the time) and augment with other types of light, i.e., shade matching light such as **Rite-Lite 2™** from Cosmedent, or viewing in natural light.
- Your materials must accurately match an existing shade guide. If not, make your own shade guide.
- You can include the patient in shade changing, but never include them in shade matching.

USEFUL TIPS FOR PLACEMENT

1 Use of a clean, dry gloved finger is very effective in rapidly forming the desired surface prior to your sculpting techniques.

2 The use of titanium-coated instruments is desired to prevent composite pull-back.

3 Use a Cosmedent 8A or 8AL (long or short blade) or a G3 for application and general shaping of the material, and the IPCT or IPCL (long or short blade) for finite refinements.

4 The use of Cosmedent's Multi-Purpose instrument is very effective for incisal groove and lobe placement, which allows enough room for addition of the incisal material.

5 Use a Caliper instrument for measurements.

6 To avoid contamination, wash and dry your gloves thoroughly prior to placement. Do not use powdered gloves.

7 Make sure your patient removes all makeup prior to treatment.

8 When applying composite, place convenience form in one piece, then sculpt off excess. This is much easier than

placing too little and then adding more.

HYGIENE / DISINFECTION

- Do not reuse a unit dose compule.
- Disinfection of the syringe and the unit dose dispenser can be carried out using a commercially available disinfecting solution.
- All instruments used should be thoroughly washed and autoclaved.

STORAGE

- Once opened, do not refrigerate.
- Keep **Renamel® Microfill** at room temperature (approximately 39-75 °F; 4-24 °C).
- Do not use after expiration date.
- Avoid direct sunlight.
- Keep material out of reach of children.

Rx IMPORTANT PRODUCT INFORMATION

Federal (U.S.) law restricts this device to sale by or on the order of a dentist.

Notice:

This product was developed for use in the dental sector and should be used in accordance with the instructions for use.

The manufacturer does not accept liability for damage caused by its use for any other purpose. The user is also obliged to accept responsibility for checking before use that the material is suitable and can be used for the intended purpose, particularly if this is not listed in the instructions for use.

CONTRAINDICATIONS

Renamel® Microfill is contraindicated if patient is known to be allergic to any of the ingredients of **Renamel® Microfill**.

SIDE EFFECTS

Can cause irritation in sensitive patients.

INTERACTIONS

Do not use **Renamel® Microfill** in combination with eugenol containing materials, as these can impede the polymerization process.

NOTICE:

During time-consuming procedures, avoid over-exposure from the operator light to protect against polymerization of the material.

WARNING

Renamel® Microfill contains 1,4-Butanediol dimethacrylate and Urethane

dimethacrylate. May cause an allergic skin reaction. Wear protective gloves. In case of contact with the eyes, rinse immediately with plenty of water and seek medical attention.

PACKAGING

Renamel® Microfill is available in 4 g syringes or Unit Dose compules each of 0.2 grams.

SHADES:

A1, A1.5, A2, A2.5, A3, A3.5, A4, A5, A6, B-Zero, B1, B2, B3, B4, C1, C2, C3, C4, C5, D2, D3, D4, White, Light Opaque
Light Incisal,
Medium Incisal,
Dark Incisal.

SuperBrite Shades:

SuperBrite 1,
SuperBrite 2,
SuperBrite 3,
SuperBrite White,
SuperBrite Light Incisal

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Version 2017-05-24

