

ProFil + + + +

Silmet Ltd
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Description

ProFil™ is a micro hybrid light-cured, radiopaque, restorative composite. It contains Bis-GMA and TEGDMA resins plus non-agglomerated nanofill silica filler and is indicated for Class I-V anterior and posterior restorations plus veneering of discolored anterior teeth, splinting of loose teeth, and anchoring of orthodontic appliances. It is available in shades A1, A2, A3, A3.5, B1, B2, B3, C2, C3; opaque shades OA2, OA3, OA3.5, OB2; and Incisal. Two-gram syringes are offered with most shades to minimize waste of less frequently used shades. **ProFil** was evaluated by 28 consultants in 809 clinical cases. It received an 87% clinical rating.

Suggested Retail Cost

- \$29.00/2-g syringe
- \$59.00/4-g syringe
- \$64.00/20 unit-dose capsules
- \$375.00/working kit with durable multi options (Self Etch/ Total Etch)

Product Features

ProFil is a light-cured composite formulated to have low polymerization shrinkage. It comes in 14 radiopaque shades that correspond with the familiar Vita Classic shade guide. Consultants reported the shade selection and color match were very good. Although the thicker viscosity makes it somewhat difficult to extrude, **ProFil** is very easy to use and stays where placed with no slumping. Consultants reported that it was easy to finish and polish. Blending with natural tooth color, as well as final polish and esthetics, are very good. Sixty-four percent of evaluators felt that **ProFil** was the same or better than their most frequently used composite, 43% would switch to it and 71% would recommend it to a colleague.

Consultants' Comments

- ◆ "Blends and polishes well."
- ◆ "Opaque shades are very effective at covering dark dentin or metal."
- ◆ "Easy to handle and looked great."
- ◆ "It's nice to have opaque shades in a kit."
- ◆ "Hard to express out of the tip."

Translating the Science

Mechanical Properties of Composites

Resin composites have replaced amalgams because of their acceptable mechanical and physical properties and tooth-colored esthetics. The important mechanical properties of composites include their flexural strength and modulus and compressive strength. These properties are important because the durability of a composite restoration is dependent on its being capable of withstanding high occlusal loads that cause both compressive and flexural stresses in the material. A composite should have a compressive strength in the range of 250–450 MPa and a flexural strength and modulus in the range of 80–160 MPa and 8.8–13 GPa, respectively. **ProFil** (Silmet Ltd.) has a flexural strength of 143 MPa and flexural modulus of 10.5 GPa. These mechanical properties indicate that **ProFil** is a mechanically sound resin composite.

Clinical Tips

- It helps to warm the composite first.
- Knead the composite on a mixing pad if a lower viscosity is desired. ■