Provipont Temporary Crown and Bridge Material (Project 95-12) (01/96)

Provipont is a dual-cured, two-component, microfill composite resin used to fabricate provisional (temporary) restorations. Ivoclar claims that Provipont can be used to fabricate temporary inlays, onlays, crowns, veneers, and short-span bridges. The product is supplied in syringes as a base paste (23% urethane dimethacrylate, 27% silicon dioxide filler, 18% copolymer of urethane dimethacrylate and silicon dioxide) and a liquid activator (100% polyisocyanate). It is available in three shades keyed to the Vita shade guide: white (A1), yellow (A3), and brown (A3.5). The paste and activator are dispensed into a mixing syringe and are then hand mixed. After mixing, the material is expressed into a vacuum-formed stent or an impression that is then placed over the prepared teeth or over a model of the prepared teeth. The manufacturer claims that after approximately two minutes, the material achieves its initial cure. At this point, the material is rubbery and the stent and provisional restoration can be removed from the preparations. The restoration can then gently be removed from the stent or impression and the excess trimmed with scissors or a scalpel. It is placed back on the prepared teeth or model and briefly light cured to reduce the potential for deformation. Finally, the restoration is removed from the mouth, further light cured, and polished.

Ivoclar claims that Provipont has several advantages compared with previously-marketed provisional materials. Among these are a superior working time, a flexible initial cure that makes it easy to remove and prevents it from locking into undercuts, easy trimming, and minimal heat generation during setting. In addition, the material is purported to be very esthetic and easily polished because it is a microfill composite resin.

Manufacturer:
Ivoclar/Vivadent
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Amherst, NY 14228
(800) 533-6825
(716) 691-0010
(716) 691-2284 FAX

Suggested Retail Price:
$199.95 Provipont System Kit (item no. 6541556) contains:
- three 30-g syringes of Base material each, shades A1 (white), A3 (yellow), A3.5 (brown)
- six 2.4-g syringes of Activator
- three application/mixing syringes
- three plastic mixing spatulas
- 30 application syringe tips
- three sets of space retainers, each with six teeth
- two posterior impression trays
- two anterior impression trays

Government Price:
$119.97 Provipont System Kit (contents and item number as listed above)

ADVANTAGES:
+ Finished provisional restorations fit very well.
+ Has sufficient working time to allow clinicians to mix the material, dispense it into the stent, and seat the stent.
+ Material rapidly sets to rubbery, elastic stage after being placed intraorally.
+ Product has very little odor.
+ Exhibits only a minimal temperature increase during setting.
+ Shades are keyed to the Vita shade guide.
+ Shades are clearly identified on each syringe.
+ Provided with a user-friendly instruction card that uses graphics to describe product use.
+ Is provided with a Material Safety Data Sheet (MSDS).
+ Plastic trays provided to facilitate stent fabrication can be steam sterilized without adverse effect.
+ Base and Activator syringes have graduated marks on them to facilitate accurate dosing.
+ Tips for the mixing syringe swivel 360 degrees and provide excellent access for dispensing the mixed material.
+ Expiration dates are clearly listed on each component.
+ Evaluators found the product easy to trim and polish.

**DISADVANTAGES:**
- Is a two-component product that requires mixing.
- Mixing syringes are very difficult to clean after use.
- Some evaluators felt the overall esthetics of their finished provisional restorations suffered because the shades that were available were too limited in range and were not light enough.
- Material is tacky after light curing.
- Lacks sufficient radiopacity to ensure easy radiographic detection.

**SUMMARY AND CONCLUSIONS:**
Provipont received mixed reviews from the clinical evaluators. They felt that the product was an improvement over other types of provisional materials because some aspects of the fabrication process were easier to accomplish and finished provisional restorations fit very well. They also found that the mixed material had little odor and that minor repairs to Provipont could be successfully accomplished using more Provipont or composite resin. Another positive characteristic was that Provipont could be trimmed while in its elastic stage. However, some negative characteristics were noted during the clinical-user portion of the evaluation. The material was somewhat difficult to handle after light activation because of its tackiness. The shades are limited in range and, generally, were judged to be too dark. The product's major shortcoming was its need to be mixed. Evaluators found it difficult to mix without incorporating air and they complained about the difficulty they encountered in trying to clean up the mixing syringe. It should be noted, however, that these concerns about mixing have essentially been eliminated because Ivoclar now markets Provipont in a cartridge form similar to that used for mixing and dispensing impression materials. In general, while Provipont is a step forward in the field of provisional materials, it has limitations. Clinicians who purchase the product should be aware that learning to use the product initially requires some time because it involves a technique distinctly different from that which they have used previously. Provipont Temporary Crown and Bridge Material is rated **Acceptable** for use by the federal dental services.

**UPDATE** Since this evaluation was completed, Ivoclar Vivadent has discontinued Provipont and is now marketing Systemp.inlay and Systemp.onlay, light-cured products for inlay and onlay temporaries.