

## Filtek™ P60 Posterior Restorative (Project 99-17) (01/00)

According to its manufacturer (3M Dental Products), P60 is an esthetic, light-cured, radiopaque resin composite specifically designed for use as a posterior direct and indirect restorative material. P60 can be considered to be in the category of "packable" resin composites such as SureFil (Dentsply/Caulk), Solitaire (Heraeus Kulzer), Pyramid (Bisco), ALERT (Jeneric/Pentron), and Prodigy Condensable (Kerr). Unlike these other products, however, P60 is not described as an "amalgam alternative." While said to be "packable," the material is not purported to have a condensibility akin to that of amalgam. In addition, unlike the majority of other packable resins, 3M recommends an incremental placement and light curing procedure using a maximum resin thickness of 2.5 mm.



P60 is filled to 61% by volume with zirconia/silica filler particles having a size range of from 0.01 to 3.5 microns. Chemically, the resin consists of Bis-GMA, UDMA (urethane dimethacrylate), and Bis-EMA (bisphenol A polyethylene glycol diether dimethacrylate). The higher molecular weights of UDMA and Bis-EMA (compared to the usual TEGDMA in many other resin composites) increases viscosity, reduces polymerization shrinkage, and reduce the resin's sensitivity to changes in atmospheric moisture (which can thicken uncured resin). P60 is recommended by 3M for the following clinical applications: direct posterior restorations, core build-ups, splinting, and indirect restorations (eg, inlays, onlays, veneers). It comes in three shades (A3, B2, C2) and is supplied with the "one-component" bonding agent, Single Bond. The product is only available in syringes.

### Manufacturer:

3M  
Dental Products Division  
3M Health Care  
3M Center, Bldg 275-2SE-03  
St. Paul, MN 55144-1000  
(800) 237-1650  
(612) 733-8524  
(800) 888-3132 FAX  
[www.mmm.com/dental](http://www.mmm.com/dental)

### Suggested Retail Price:

\$163.00 Filtek P60 Posterior Restorative System, Introductory Kit (item number 4720) contains:  
-three 4-g syringes, one each of shades A3, B2, C  
-one 3-mL bottle of Single Bond Dental Adhesive  
-one 3-mL syringe of Scotchbond Etchant  
-accessories

### Government Price:

\$98.00 Filtek P60 Posterior Restorative System, Introductory Kit (contents and item number as listed above)

### ADVANTAGES:

- + Is adequately cured in 2.5-mm layers with only a 20-second light exposure.
- + Is one of the hardest packable resin composites available.
- + Highly radiopaque; is easy to differentiate from tooth structure on radiographs.
- + Expiration date and lot number stamped on product syringes.

- + Packaged with fast, easy-to-apply bonding agent (Single Bond).
- + Provided with a user-friendly instruction card.
- + Handles well; provides resistance to packing that makes it easier to establish acceptable interproximal contacts.
- + Adequate working time; not overly sensitive to ambient light.
- + Polishability and overall esthetics were rated highly by evaluators.

**DISADVANTAGES:**

- Second most expensive packable resin composite (per gram of refill material).
- Not available in capsule form.
- Box is large for amount of product provided.
- Material Safety Data Sheet (MSDS) is not provided in kit.
- Is slightly tacky.
- Some evaluators found shade range too limited.

**SUMMARY AND CONCLUSIONS:**

Filtek P60 was judged by the majority of our clinical evaluators to be straightforward to use and it produced esthetic, polishable restorations. Its thicker viscosity and resistance to packing made it easier for clinicians to establish acceptable interproximal contacts than with traditional resin composites, however band burnishing and proper wedging were still important factors. P60 requires less time to cure than most other resin composites and is adequately polymerized in 2.5-mm thicknesses. Although relatively expensive compared to traditional resin composites, P60's handling characteristics offer some important advantages when it is used as a direct posterior restorative material. **Filtek P60** is rated **Acceptable** for use by the federal dental services.