

Venus Color Adaptive Matrix Restorative (Project 02-36) (05/03)

Venus is a new microhybrid resin composite by Heraeus Kulzer. The Bis-GMA based resin contains fillers consisting of barium aluminum boron fluoride silica glass and highly-dispersed silicon dioxide. The barium glass fillers average 0.7 microns characterized by a very narrow particle size distribution. The colloidal silica ranges from 0.01 to 0.04 microns. The overall filler content is 78% by weight and 61% by volume. Venus is built around 23 shades in three opacities. The Venus 2-Layer shade guide is made up of original Venus composite resin and is hand-layered in the same manner as is done clinically. The superficial layer is the semi-translucent enamel shade and the deeper layer is the opacious dentin shade. Its viscosity has been increased substantially, the company claims, to make the material more sculptable, nonslumping, and nonsticky. An illustrated-technique guidebook covers all major indications plus the art of layering, avoiding postoperative sensitivity, and optimizing interproximal contacts. Venus is indicated for all classes of cavity preparations as well as indirect restorations, core build-ups, and veneering.



Manufacturer:

Heraeus Kulzer, Inc.
99 Business Park Drive
Armonk, NY 10504
(800) 431-1785
(914) 273-8600

www.Heraeus-Kulzer-US.com

Suggested Retail Price:

\$735.00 Venus Master's Kit (item no. 66007955) contains:

- 23 Venus shades
- 5 Durafill shades
- 2 Effect Color shades
- Gluma Etch 20
- Gluma Bond
- 2-Layer shade system

Government Price:

\$430.02 Venus Master's Kits (item number and contents as listed above)

ADVANTAGES:

- + Handles well; easy to place and manipulate from unit-dose capsules.
- + Very complete Master's Kit with bonding agent, 2 surface effect stains, 5 microfill and 23 hybrid shades in 3 opacities.
- + Well-designed packaging holds product securely.
- + Lot number and shade are printed on individual capsules.
- + High degree of radiopacity; can easily be distinguished from tooth structure on radiographs.
- + Enamel and translucent shades require only 20 seconds for adequate curing.
- + Instructions are provided in a high-quality, graphics-containing booklet.
- + Innovative 2-layer shade guide made of actual composite.
- + Refills are moderately priced.
- + Users rated the product highly for polishability and overall esthetics.
- + Does not slump after placement.
- + Surface roughness after polishing was similar to tested microfills.

DISADVANTAGES:

- Master's Kit is expensive.
- Diametral tensile strength is among the lowest of hybrids tested.
- Dispensing gun did not hold capsules securely.
- Expiration date not printed on individual capsules.
- Some sticking to instruments noted on placement.
- Material Safety Data Sheet (MSDS) is not provided with kit.
- Four shades (out of a possible 27) not provided in the Master's Kit.

SUMMARY AND CONCLUSIONS:

Overall, Venus did well in clinical-user testing. Its polishability, esthetics, and shade matching were rated highly by users. Its mechanical properties and radiopacity were comparable to some popular hybrid resin composites and its immediate polishability was similar to tested microfills. The Master's Kit comes complete with bonding agent, surface effect stains and microfill composites. DIS recommends Venus for multi-opacity esthetic restorations and it may be especially useful in general dentistry residency programs. The initial kit is very expensive to purchase, but refills are moderately priced. **Venus** is rated **Acceptable** for use by the federal dental services.