

## Eclipse Prosthetic Resin System (Project 05-22) (5/06)



Eclipse is a polymethylmethacrylate-free light-cured resin system for fabricating denture bases and nightguards. The Eclipse system uses the indirect build-up technique for fabricating dentures. Eclipse utilizes three different resins to form the denture base: baseplate resin, set-up resin, and contour resin. The resins handle like wax and are cured when shaping is complete. The completed denture base is fabricated on the master cast before the jaw relation and try-in appointment, making for more stable jaw relations and providing an opportunity to assess the fit before the insertion appointment. The teeth are held in place for the try-in with

the set-up resin. Contour resin is then applied with an electric spatula to form the proper contours of the denture base. The manufacturer claims the Eclipse system is faster than conventional heat-curing systems since there is no flasking or investing required. The system includes a processing unit, conditioning oven, electric spatula and tips, melting pot, hot-air gun, and an assortment of auxiliary materials, burs and brushes. Also included are Eclipse baseplate, setup, and contour resins (boxes of 12) which are available in original light pink, light reddish pink, and dark pink shades. A two-day "hands-on" laboratory certification course that provides information and instructions for making removable-prosthetic appliances is available from the manufacturer upon request.

### **Manufacturer:**

Dentsply International  
P.O. Box 872  
York, PA 17405  
(800) 786-0085  
(717) 845-7511  
(717) 849-4762 FAX  
[www.dentsply.com](http://www.dentsply.com)

### **Suggested Retail Price:**

Eclipse Prosthetic Resin System - \$16,380.00

Includes: Eclipse processing unit with lamp, conditioning oven, melting pot, hot air gun, heat-resistant gloves, electric spatula, 12-pack box of resin, and tooth cage.

### **Government Price:**

Eclipse Prosthetic Resin System - \$11,497.20  
(contents as above)

### **ADVANTAGES:**

- + Minimal adjustments needed
- + No methacrylate monomer
- + Short initial learning curve
- + No flasking or boilout required
- + Nightguards required minimal laboratory adjustments
- + Nightguards demonstrated low porosity and high translucency

### **DISADVANTAGES:**

- Start-up costs high
- Set-up resin viscosity too low
- Difficult to obtain high polish
- Esthetic repairs more difficult to make

- Materials may trap air when adapted
- Duplication of master cast may be required

**SUMMARY AND CONCLUSIONS:**

Eclipse is a light-cured prosthetic-resin system manufactured by Dentsply International that contains no polymethyl methacrylates. The manufacturer claims the Eclipse system is faster than conventional heat-cured systems since no flasking or long heat curing time is required. Evaluators felt appliances fabricated with the Eclipse system were very esthetic and fit well. However, bond strength of the denture teeth to the acrylic seemed poor, requiring mechanical retention. Dentsply has since come out with Eclipse Bonding Agent to create a chemical bond between acrylic teeth and Eclipse resin material. Evaluators reported that nightguard fabrication took slightly more time than the traditional sprinkle method because of cast duplication. Cast duplication may be necessary since processing will destroy the cast. Evaluators also reported having difficulty gaining a high polish, but stated the final product was very transparent. Although four out of six evaluators did not recommend its purchase to replace their current system, two users noted that it would work well for fabricating hard nightguards expediently. **Eclipse** is rated **Acceptable** for use in US Air Force dental facilities.