

**63-21 Disposable Prophy Angles (Project 99-39) (9/01)**

A disposable prophy angle (DPA) is a dental device that is used to polish teeth. It is driven by a dental motor through a doriot attachment. The DPA is to be used only once and is then discarded. All DPAs consist of three primary parts: 1) head (where the prophy cup is fastened), 2) body (which houses the internal mechanical parts), and 3) mandrel (which is inserted into the doriot attachment to transfer the rotation of the slow-speed handpiece to the rubber prophy cup). DPAs are made of plastic and are sold in different colors and cup flexibilities (e.g., ultra soft, soft, firm, etc.). DPAs are also manufactured that have cups that are latex-free and have different types of internal designs (e.g., webbed, ribbed, and square ribbed). The particular models evaluated in this project were determined by the manufacturers, who were asked to provide samples of their most popular brand. Five manufacturers participated in the project's laboratory evaluation and six participated in the clinical evaluation. Pertinent information for the evaluated models of prophy angles is provided in the following table.



| Product Name and Model Evaluated | Manufacturer   | Quantity   | Retail Price               | Government Price           |
|----------------------------------|--|------------|----------------------------|----------------------------|
| AllPro model 801                 | AllPro, Inc.<br>P.O. Box 733<br>6930 W. 116th Ave, #10<br>Broomfield, CO 80038<br>(303) 466-8911<br>(303) 466-8965 FAX   | box of 100 | \$35.50<br>(36 cents each) | \$23.50<br>(24 cents each) |
| Duropro model 1207               | John L. Butler Co.<br>4635 West Forrest Ave<br>Chicago, IL 60630<br>(773) 481-6898<br>(773) 777-1417 FAX<br><a href="http://www.jbutler.com">www.jbutler.com</a> | box of 200 | \$83.50<br>(42 cents each) | \$67.20<br>(34 cents each) |
| Original Green model 501314      | Denticator<br>13705 Shoreline Court<br>East<br>Earth City, MO 63045<br>(800) 227-3321<br>(314) 344-0021 FAX  | box of 144 | \$61.00<br>(42 cents each) | \$39.50<br>(27 cents each) |

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|                            | <a href="http://www.denticator.com">www.denticator.com</a>   |            |                             |                            |
| Nupro Supreme model 965105 | Dentsply Professional Division<br>1301 Smile Way<br>York, PA 17404-0807<br>(800) 989-8825<br>(800) 278-4344 FAX<br><a href="http://www.dentsply.com">www.dentsply.com</a>      | box of 100 | \$58.00<br>(58 cents each)  | \$34.00<br>(34 cents each) |
| Pivot model 1100013        | Preventech<br>1207 Crews Rd. Suite C<br>Matthews, NC 28105<br>(704) 849-2416<br>(704) 849-2417 FAX<br><a href="http://www.preventech.com">www.preventech.com</a>               | box of 144 | \$57.00<br>(40 cents each)  | \$34.00<br>(24 cents each) |
| Young Junior model 131420  | Young Dental Mfg<br>13705 Shoreline Court East<br>Earth City, MO 63045<br>(314) 344-0010<br>(314) 344-0021 FAX<br><a href="http://www.youngdental.com">www.youngdental.com</a> | box of 200 | \$100.00<br>(50 cents each) | \$65.00<br>(33 cents each) |

**ADVANTAGES:**

- + The need for maintaining and sterilizing prophylaxis angles is eliminated.
- + A new angle is available for use every time.
- + Consistent with the unit-dose concept and practice.
- + Latex-free cups available.
- + May reduce the potential for cross contamination.
- + Eliminates the need to purchase separate prophylaxis angle heads and cups.
- + Provided in a sealed package for patient presentation.
- + Some brands are available with the prophylaxis paste pre-packaged with the angle.

**DISADVANTAGES:**

- May be more expensive to use than reusable prophylaxis angles.
- May vibrate and make more noise than reusable prophylaxis angles.
- Potential exists to need more than one angle to complete patients with heavy stain.
- Initial purchase of doriot attachments is required.

**SUMMARY AND CONCLUSIONS:**

The DIS laboratory evaluation (based on the draft ANSI/ADA Specification 85 - Disposable Prophylaxis Angles) found all DPAs in this evaluation functioned well and satisfied the basic requirement of removal of stain and dental plaque. They can be considered acceptable alternatives to standard reusable prophylaxis angles. Based on the overall clinical evaluators' responses, the Dentsply Nupro Supreme, Young Junior, and Preventech Pivot models were slightly preferred over the Butler Duropro, AllPro, and Denticator Original Green DPAs. However, the ones least preferred still scored good to excellent in the clinical evaluation. The **Denticator Original Green, AllPro, Preventech Pivot, Young Junior, Butler Duropro, and Dentsply Nupro Supreme** are all rated **Acceptable** for use by the federal dental service.