AdheSE (Project 03-18) (12/03)

AdheSE is a light-cured, two-step, self-etching bonding agent by Ivoclar Vivadent marketed for use with all direct-resin restorations. Self-etching adhesives save time by eliminating the separate etching and rinsing procedures. The patented monomer purportedly increases shelf-life by reducing hydrolysis of the components. The demineralization of the tooth surface and the infiltration of the demineralized areas with monomers reportedly take place simultaneously and potentially reduce post-operative sensitivity. AdheSE is available from Ivoclar Vivadent in an introductory pack containing two 5-gm bottles, a mixing well, and applicators.

Manufacturer:
Ivoclar Vivadent
175 Pineview Drive
Amherst, NY 14228
(800) 533-6825
(716) 691-0010
(716) 691-2285 FAX
www.ivoclarvivadent.us.com

Suggested Retail Price:
$105.00 AdheSE Dental Adhesive (item number 573690):
- two 5-gm bottles
- mixing well
- applicators
- instructions/technique card

Government Price
$52.50 AdheSE (item number 573690) as listed above

ADVANTAGES:
+ Relatively inexpensive
+ Few application steps
+ Fast to apply
+ Does not require refrigerated storage
+ No separate enamel-etching step required
+ No reports of post-placement sensitivity
+ Application process is shown pictorially on card
+ Recommended storage conditions provided on instruction sheet, box, and bottles of adhesive
+ Can be applied to dried tooth structure, which helps standardize application procedure
+ No offensive odor reported
+ Expiration dates and lot numbers on individual components
+ Material Safety Data Sheet (MSDS) provided with product

DISADVANTAGES:
- Can only be used for bonding direct resins to enamel and dentin
- Moderate shear-bond strength to dentin
- Not recommended for use on uncut enamel
- Incompatible with chemically-activated materials
- Contraindicated for bonding of indirect restorations
- No clinical studies available
- Not available in unit-dose form
SUMMARY AND CONCLUSIONS:
AdheSE is one of a growing list of self-etching bonding agents that etch and prime in one step and bond in a second step. Because it is applied in two steps, it is easy to use and quick to apply. However, like many new self-etching bonding agents, AdheSE has limited clinical applications and should not be viewed as a multi-substrate bonding agent. The bonding agent is incompatible with chemically-activated materials and contraindicated for use on uncut enamel and with indirect restorations. Laboratory testing found only moderate shear-bond strength to dentin. The dentin need not be moist when it is applied. This is advantageous because many clinicians are typically unsure of the proper degree of dentinal moisture at the time of bonding. AdheSE is relatively inexpensive and does not need to be refrigerated. For the simple bonding procedures for which it is intended, AdheSE is rated Acceptable for use by the federal dental services.