

65-25 Bistite II SC (Project 01-18) (04/02)

For **UPDATE**, click [here](#).

Tokuyama Corp/J. Morita USA markets Bistite II SC, a resin cement based on a proprietary MAC-10 adhesive monomer. The auto-cure cement is reported to be filled 77 percent (by weight) with silica and zirconium filler particles. Similar to the Panavia resin luting cements, Bistite II SC's polymerization reaction is oxygen inhibited and the supplied Air Barrier gel should be placed on exposed margins so the cement can adequately cure. The manufacturer recommends Bistite II SC for the cementation of: noble, semi-precious, and base-metal crowns, inlays, and onlays; porcelain-fused-to-metal castings; and resin-bonded fixed partial dentures. It is also advertised as being able to cement all-ceramic and resin restorations as well as cast post and cores. Bistite II SC is said to be all-inclusive, containing a phosphoric acid-based porcelain primer to allow the intraoral repair of porcelain restorations. In addition, the standard kit includes Metallite, a noble-metal primer based on the MTU-6 adhesive monomer. Metallite is purported to produce a suitable bonding interface that is as effective as tin-plating for noble metals. The standard kit also includes an acetone- and HEMA-based, self-etching bonding system that requires no rinsing or visible light curing. Bistite II SC is available in three shades (Opaque, Translucent, and Dentin) but additional shades can be purchased separately. Along with a multi-language, instruction pamphlet, a seven-page Clinical Procedure Guide booklet is provided.



Manufacturer/Distributor:

Tokuyama Corp/J Morita USA
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Irvine, CA 92618
(888) 566-7428
(949) 581-9600
(949) 465-1095 FAX
www.jmoritausa.com

Suggested Retail Price: \$170.00

Bistite II SC Clear Standard Kit (item number 26-41110)
Bistite II SC Brown Standard Kit (item number 26-41210)
Bistite II SC Ivory Standard Kit (item number 26-41310)

Contains:

- resin cement (one 3.5-g bottle Base, one 3.5-g bottle Catalyst)
- tooth primers (one 5-mL bottle Primer 1A, one 5-mL bottle Primer 1B, one 5-mL bottle Primer 2)
- one 5-mL bottle Metallite Precious Metal Primer
- Ceramic Primer (one 5-mL bottle Primer A, one 5-mL bottle Primer B)
- Air Barrier
- instructions
- accessories (mixing well, mixing pad, brushes, handles, and dispensing tips)

Government Price:

\$119.00 Bistite II SC Standard Kit (item numbers and contents as listed above)

ADVANTAGES:

- + Is easy to use and kit contains all components for its advertised uses.
- + Lowest film thickness of any resin cement evaluated by DIS to date.
- + Includes a self-etching dentin bonding agent that is easy to use.
- + Supplied with a porcelain primer that is easy to apply and can be used for intraoral repairs.
- + Has a metal primer that may replace tin-plating for the luting of noble-metal castings.
- + Working time is long enough that users can mix and use cement without rushing.
- + Setting time is adequate for the cleaning of excess cement.

- + No post-treatment sensitivity reported.
- + Adequately radiopaque for easy detection on radiographs.
- + Users found the Translucent shade adequate for most clinical cases they treated.
- + Expiration dates and lot numbers are provided for all items in kit.
- + Recommended storage conditions listed on box.
- + Written instructions are detailed and describe product use very well.
- + Packaged in compact box with all components intelligently arranged.
- + Material Safety Data Sheet (MSDS) is included in kit.

DISADVANTAGES:

- Additional shades must be purchased separately.
- Dispensing syringe tended to clog in a small number of cases.

SUMMARY AND CONCLUSIONS:

Bistite II SC was very well-received by the clinical evaluators. Users found the instructions complete and the product user-friendly. Importantly, the kit contained all the components necessary for the cement's advertised uses, including both porcelain and a noble-metal primers. The provided self-etching primer was reported to be easy to use. Evaluators also appreciated Bistite II SC's compact packaging. The product performed well in the laboratory: it had the lowest film thickness found by DIS evaluations to date, appropriate working and setting times, and adequate radiopacity. Esthetically, the cement performed well and there were no reported incidences of post-operative sensitivity. Bistite II SC is competitively priced. All of the clinical users recommended that this cement replace the current resin cement system they use at their facilities. **Bistite II SC** is rated **Recommended** for use by the federal dental services.

UPDATE Recent laboratory studies completed at Tokuyama Dental Research Center have found that low bond strengths can occur when using the kit's ceramic primer with all-ceramic crowns containing alumina and zirconia such as Procera (Nobel Biocare), In-Ceram (Vident), and Cercon (Dentsply Ceramco). For such restorations, the company recommends simply roughening the intaglio surface of the restoration with a sandblaster or diamond bur before cementing. Additionally, the manufacturer's recommendations on bonding procedures for use with their all-ceramic material should be reviewed and followed.

UPDATE Shortly after this evaluation was completed, the Tokuyama Corp. announced that it was discontinuing Bistite II SC and replacing it with a new product, the dual-cured Bistite II DC.