

THE UNIVERSITY OF TOLEDO MEDICAL CENTER STERILE PROCESSING DEPARTMENT PROCEDURE

**SUBJECT: HIGH LEVEL DISINFECTION
OF INSTRUMENTS IN THE OR
USING METRICIDE 14 DAY SOLUTION**

PROCEDURE NO: SP7-4

PROCEDURE STATEMENT

Instrumentation that will come in contact with non-intact skin or mucous membranes may receive high level disinfection. Items used in sterile tissue must receive sterilization.

PURPOSE OF PROCEDURE

To guide the selection process for the sterilization/high level disinfection of surgical instrumentation.

PROCEDURE

PERSONAL PROTECTIVE EQUIPMENT

A mask, face and eye protection and exam gloves should be worn while handling disinfecting solutions.

High-Level Disinfecting Solution Daily Testing

- 1: Ensure that the solution to be tested has been activated according to labeling instructions.
- 2: Enter date bottle opened in Solution Log Sheet.
- 3: Pour desired amount of solution into designated receptacle.
- 3: Obtain an indicator strip and dip indicating pad in activated solution for 2 seconds, then remove. (*Do not dip pad for longer than 2 seconds or swirl strip in solution.*)
- 4: Remove excess solution from the pad by standing strip upright on paper towel. (*Do not shake strip after removal.*)
- 5: Read the results of the color reaction exactly after 60 seconds and discard the strip. (*Disregard the top 2mm of pad which may show Yellow.*)

An effective concentration will turn the pad completely purple. If any Yellow appears on the pad (apart from the 2mm at the top of the pad) the solution is below the MEC and must be discarded.

High-Level Disinfectant Solution Log Sheet

All of the following information must be entered into the log sheet for each day's test.

- 1: Department.
- 2: Product used.
- 3: Check "Tee Basin" or "Blue Basin"
- 4: Test date.
- 5: Date solution activated or opened.
- 6: Date activated/opened solution expires (14 days.)
- 7: Expiration date on test strip bottle.
- 8: Date that the test strip bottle was opened.
- 9: Date that the test strip bottle expires after opening (90 Days from Opening.)
- 10: Test time and MEC results (+ = Pass, - = Fail.)
- 11: Temperature of solution. (Minimum temperature must be 77°F.)
- 12: Action taken if MEC fails. (Solution is discarded and new solution is activated.)
- 13: Solution tester's initials.

Instrument High-Level Disinfection or Sterilization

- 1: Thoroughly clean Instruments in approved detergent or enzyme cleaner according to manufacturer's instructions. All bio burden must be removed from the instrument surface and lumens.
- 2: Thoroughly rinse instrument surface and lumens with fresh tap water.
- 3: Thoroughly dry instruments to be disinfected using a lint-free towel.
- 4: Immerse instruments in activated solution for prescribed time.

HLD: (45 minutes.) Lumened instruments should be flushed with the disinfecting solution using a sterile syringe.

STERILIZATION: (10hours.) Lumened instruments should be flushed with the disinfecting solution using a sterile syringe.

- 5: Remove instrument promptly after process time is complete.
- 6: Thoroughly rinse the instruments and flush lumens in three separate copious volumes of water. Each rinse should be a minimum of 1 minute in duration. Use fresh portions of water for each rinse.

Device Procedure log High-Level Disinfectant

All of the following information must be entered into the log sheet for each day's test.

- 1: Department name.
- 2: Solution being used.
- 3: Procedure date.
- 4: Attach patient label.
- 5: Device and serial number (if applicable.)
- 6: Temperature of solution. (Minimum temperature must be 77°F.)
- 7: Time instrument is placed in along with operator's initials.
- 8: Time instrument is taken out of solution along with operator's Initials.

Solution must be discarded 14 days after activation.

QA Procedure for High Level Disinfectant Test Strips

- 1: Prepare a positive control by filling a small cup with newly prepared full strength solution.
- 2: Prepare negative control by filling a small cup with 1 part full strength solution and 1 part water.
- 3: Submerge 3 new test strips in the full strength solution and 3 strips in the half strength solution for 1 second.
- 4: The strips dipped in the full strength solution should exhibit a complete purple color on the indicating pad at 90 seconds.
- 5: The strips dipped in the half strength solutions should either remain completely blue or exhibit an incomplete color change to purple at 90 seconds.
Refer to the color chart on the bottle for interpretation results.
- 6: Testing is to occur on each newly opened test strip bottle and at 14 days after the bottle has been opened.
- 7: If the QA test results are unsatisfactory, discard the test strips and obtain a new bottle.

References: ANSI/AAMI ST58:2005/(R) 2010

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