

PROGRAM Standard Operating Procedure – Laboratory Services	
Title: MIC60050 – Dispensette Sterility Test	Policy Number:
Program Name: Laboratory Services	
Applicable Domain: Lab, DI and Pharmacy Services	
Additional Domain(s): NA	
Effective Date:	Next Review Date:
Issuing Authority: Director, Laboratory and Diagnostic Imaging Services	Date Approved:
Accreditation Canada Applicable Standard: NA	

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GUIDING PRINCIPLE:

The dispensette and saline used to perform testing with the VITEK 2 instrument and GAS PCR testing are prone to contamination and need to be checked weekly to ensure accurate patient results are obtained.

PURPOSE/RATIONALE:

This standard operating procedure describes how to check the sterility of the saline used to prepare organisms for VITEK 2 and GAS PCR testing.

SCOPE/APPLICABILITY:

This procedure applies to Medical Laboratory Technologists (MLTs) using the saline dispensette for VITEK 2 and GAS PCR testing.

REAGENTS and/or MEDIA:

- Thioglycolate broth (THIO)
- Sterile saline (0.45%)

SUPPLIES:

- Dispensette mounting tool
- Sterile water
- Sterile swabs
- Gauze
- Towel

EQUIPMENT

- Dispensette
- Steris steam autoclave and supplies

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SPECIAL SAFETY PRECAUTIONS:

Containment Level 2 facilities, equipment, and operational practices for work involving infectious or potentially infectious materials or cultures:

- Ensure that appropriate hand hygiene practices be used
- Lab gown must be worn when performing activities with potential pathogens
- Gloves must be worn when direct skin contact with infected materials is unavoidable
- Eye protection must be used when there is a known or potential risk of exposure of splashes
- All procedures that may produce aerosols, or involve high concentrations or large volumes should be conducted in a biological safety cabinet (BSC)
- The use of needles, syringes and other sharp objects should be strictly limited

All patient specimens are assumed to be potentially infectious. Routine Practices must be followed. Since viable micro-organisms are used, all cultures must be handled with appropriate precautions. All equipment in contact with cultures should be decontaminated by appropriate methods.

PROCEDURE INSTRUCTIONS:

Step	Action
Weekly dispensette sterility test	
1	Order the sterility testing in the LIS: <ul style="list-style-type: none">• In Order Entry, enter the Last Name: TEST and First Name: MICRO STERILITY• Enter DUMD in the Req. by box and order the test CXENV• The source ENV-Environmental is automatically added• Collect, receive and plate order• In Current Antibiotic Therapy select NA for not applicable• In Micro OE comment, state source of saline-VITEK or GAS Dispensette
2	Label 2 Thioglycolate broth tubes and indicate on the label which dispensette the order is for-VITEK or GAS Dispensette.
3	Dispense 3mL of saline into the tube from each dispensette.
4	Place broths in the "Dispensette Sterility" rack in the O ₂ incubator.
5	Read broths daily for 3 days and observe for signs of growth.

INTERPRETATION OF RESULTS:

Step	Action
1	If THIO broth remains clear (no growth): <ul style="list-style-type: none">• Record "No Growth" results daily in LIS• After 3 days, report "No Growth After 3 Days" and finalize
2	If THIO broth turns cloudy (growth): <ul style="list-style-type: none">• Record "Cloudy-AUTOCLAVE dispenser ^CLAVE" in LIS• Result ^CLAVE with date dispensette was autoclaved• Report "Cloudy-AUTOCLAVE dispenser" and finalize

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3	Discard the saline bottle with the contaminated dispensette and sterilize the dispensette as per below.
4	Assemble a new dispensette to replace the one scheduled for autoclaving.

SALINE DISPENSETTE PARTS:


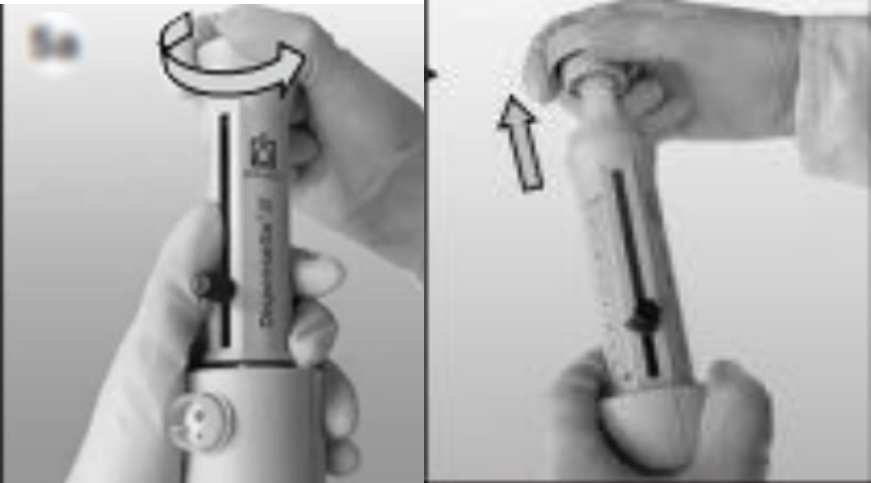
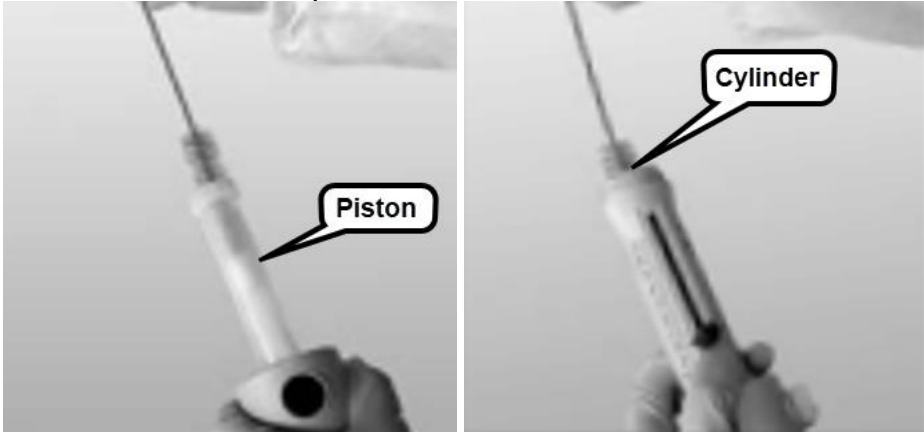


- 1. Piston**
- 2. Housing**
- 3. Volume adjustment knob**
- 4. Discharge tube**
- 5. Discharge tube screw cap**
- 6. Telescopic filling tube**
- 7. Cylinder**


CLEANING THE DISPENSETTE:

Step	Action
1	It is important that the dispensette is cleaned before it is autoclaved to prevent damage from occurring.
2	Remove the dispensette from saline bottle and screw onto a bottle of sterile water. Rinse the dispensette several times by completely filling and emptying it.
3	Remove dispensette from sterile water and discharge any remaining liquid.
4	Pull out the telescopic filling tube: 

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5	<p>Use mounting tool to unscrew the filing valve by turning it counterclockwise:</p> 
6	<p>Loosen piston. Hold the housing securely and unscrew the piston completely by turning it counterclockwise. Carefully pull out the piston. Do not remove the housing!</p> 
7	<p>Clean piston and cylinder with a gauze and sterile swab. If necessary remove deposits at the edge of the glass cylinder, taking care not to scratch the interior of the cylinder.</p> 
8	<p>Flush all parts with sterile water and allow parts to dry.</p>
9	<p>Insert the piston completely into the cylinder.</p>

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10	<p>Check that the filling valve is securely seated and tightened by turning clockwise using the mounting tool.</p> 
11	Reassemble the dispensette.
12	Place dispensette and mounting tool on a towel. Loosely close the towel with autoclave tape to ensure parts do not come into contact with metallic surfaces.
13	Autoclave in the Steris steam autoclave at 250°F for 50 minutes.
14	After cycle is complete, allow dispensette to cool for approximately 2 hours.
15	Inspect all parts for any damage.
16	Once dispensette is cooled and inspected for damage, place back into box.

CROSS REFERENCES:

NA

REFERENCES:

1. Brand. (2016-02). *Dispensette User Manual*, 9974 90

APPROVAL:

Date

Director, Laboratory and Diagnostic Imaging Services

REVISION HISTORY:

REVISION	DATE	Description of Change	REQUESTED BY
1.0	22 Nov 17	Initial Release	L. Steven
2.0	06 Oct 19	Updated to reflect new steam autoclave	L. Steven
3.0	04 Aug 21	Procedure reviewed and added to NTHSSA policy template	L. Steven
4.0	14 Aug 23	Procedure reviewed	L. Steven
5.0	15 Apr 25	Procedure reviewed and updated to include GAS PCR dispensette	L. Steven

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