

MICRORIOLOGY DEPARTMENT

STANDARD OPERATING PROCEDURE		
Department: Microbiology	SOP No.:	
Title: Procedure for Operation and Cleaning of Microscope	Effective Date:	
Supersedes: Nil	Review Date:	
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1.0 OBJECTIVE

1.1 To lay down the procedure for operation of vertical autoclave.

2.0 SCOPE

2.1 This procedure is applicable for Microbiology Laboratory.

3.0 RESPONSIBILITY

3.1 Microbiologist and lab attendant is responsible for operation & cleaning of vertical autoclave.

4.0 ACCOUNTABILITY

4.1 Head microbiology shall be accountable for the SOP.

5.0 EHS CONSIDERATIONS

- 5.1 Switch 'OFF' the vertical autoclave after completion of the cycle.
- 5.2 Do not open the lid when pressure inside chamber.

6.0 PROCEDURE

- 6.1 Check the water level inside the chamber by removing the bucket. Heater must be completely dipped in water. Always use purified water.
- 6.2 Keep the material to be decontaminated inside the basket and close the lid firmly by rotating the wheel in clock wise direction.
 - 6.3 Connect the autoclave to the main power supply and switch on the main supply.



- 6.4 Red LED will start glowing.
- 6.5 Switch on the button provided on the panel and controller will start displaying.



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- 6.6 Set the main controller by pressing the SET key to temperature 122.0°C and cycle time for 30 minutes and press the ENTER key.
- 6.7 Open the release valve till boiling of water starts inside the chamber and hear the sound of the displacement of air.
- 6.8 After that close the release valve and let the pressure increases inside the chamber.



- 6.9 Controller will maintain the set temperature 122.0°C for the set time 30 minutes.
- 6.10 After completion of cycle, alarm comes.
- 6.11 After completion of the cycle, switch off the autoclave.
- 6.12 Now gently release the steam by opening the release valve very slowly.
- 6.13 Ensure the chamber pressure "zero" before opening the lid from the pressure gauge provided on the panel.
- 6.14 Once the steam is released completely, open the lid slowly by rotating the handle in anticlockwise direction.
- 6.15 Open the lid by pressing the paddle lifting device.
- 6.16 Take out the material and hand over to the decontaminated culture media waste to waste collection person and glassware for cleaning.
- 6.17 Record the Autoclave usage record as per pattern VHS/XXXX/YY where, VHS=Vertical heat sterilization and XXXX=sequential cycle number and YY=financial year i.e. VHS/0001/14
- 6.18 Cleaning:
- 6.18.1 Ensure that power supply to the autoclave is switched 'OFF' before cleaning. Remove the plug from the socket.



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- 6.18.2 Clean the outer surfaces of the autoclave with a clean cloth every day.
- 6.18.3 To clean the chamber, a drain valve is provided at the bottom. Place a vessel of adequate size below it and collect the water.
- 6.18.4 Water should be replaced on daily basis.

7.0 DEFINITIONS AND ABBREVIATIONS

7.1 VHS - Vertical heat sterilization.

8.0 REFERENCE

8.1 NA

9.0 ANNEXURES

9.1 Annexure I : Vertical autoclave usage record

9.2 Annexure II : Vertical autoclave load pattern

10.0 DISTRIBUTION DETAILS

10.1 Controlled copy of this SOP shall be distributed to Quality Assurance and Microbiology.

11.0 REVISION HISTORY

Supersedes SOP No.	Change Control No.	Reason for revision



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ANNEXURE I VERTICAL AUTOCLAVE USAGE RECORD

S.No.	Date	Cycle No.	Items Destructed	Cycle Started at	Pressure Maintained	Temp. Maintained	Pressure & Temp. Maintained For	Cycle Completed At	Done By	Reviewed By



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ANNEXURE II VERTICAL AUTOCLAVE LOAD PATTERN

Load pattern 01: Media Decontamination Cycle



Items	Quantity
Media disposal bag-2500 ml	5 no.