



PHARMA DEVILS
MICROBIOLOGY DEPARTMENT

PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

Pre - Execution Approval

	Name	Designation	Signature	Date
Prepared By				
Reviewed By				
Reviewed By				
Reviewed By				
Approved By				



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

1.0 Objective:

- To establish documented evidence which will provide a High degree of assurance and reliability about the performance of the Steritest - Equinox.
- To determine that the Steritest - Equinox performs as intended by repeatedly running the system on its intended schedules and recording all relevant information and data. Results must demonstrate that performance consistently meets predefined specifications under normal conditions and where appropriate for worst case situations.

2.0 Scope:

Scope is limited to the following

Equipment / System Name	STERITEST - EQUINOX
ID Number
Location	Sterility Testing Room

3.0 Performance Verification Checklist:

Verify the performance of all the critical process/functions as per their respective procedure. Refer Performance Verification Checklist as per Annexure - I.

4.0 Any Changes/Deviations identified during operating checks:

Refer Annexure – II.

5.0 Recommendations and Conclusions:

.....
.....
.....
.....



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

6.0 References:

Installation Qualification
Operational Qualification
Standard Operating Procedure

7.0 Annexure

Annexure - I : Performance Verification Checklist
Annexure - II : List of Changes / Deviation.
Annexure - III : Performance Qualification Report.

8.0 Abbreviations:

SOP : Standard Operating Procedure

Post execution approval:

	Name	Designation	Signature	Date
Compiled By				
Reviewed By				
Reviewed By				
Reviewed By				
Approved By				



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

Annexure - I
Checklist for Performance Verification

(A). Reference Instrument Verification: -

Instruments	Cat. Number	Serial Number	Last Calibration Date	Next Calibration
Incubators	-----			

(B). Work area, Environment and Personnel Preparation Verification: -

Equipment		
Description	Type / concentration of cleaning agent or Autoclaving Temperature / Time	Related SOP
LAF		
Steritest Equinox pump body		
Steritest Equinox pump Head		
Canister Holder / Tubing		
Steritest Expendables Packaging		



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

(D). Material Disposal Work Sheet Verification:

Material For Disposal	Disposal Method	Related SOP
Media, Non Contaminated		
Steritest Device, Non Contaminated		
Rinse Fluid, Non Contaminated		
Covers, Papers, Non Contaminated		
Media Contaminated		
Steritest Devices, Contaminated		
Rinse Fluid, Contaminated		
Covers, Papers, Contaminated		

(E). Steritest Device Chemical Compatibility Verification:

Fluid Used for the Test	Catalogue Number (If applicable)	Lot Number (If applicable)	
Pressure Measurement System Used	Type and/or Catalogue Number	Serial Number	Last Calibration Date



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

(E). Steritest Device Chemical Compatibility Verification:

Bubble Point Prior to Product Exposure					
Steritest Device Catalogue Number:					
Lot Number	Test No.	Measured Bubble Point (mbar/psi)		Acceptance Criteria (mbar/psi)	Pass / Fail
		Canister A	Canister B		

Product Exposure							
Steritest Device Catalogue Number:							
Contact Time:							
Test No.	Visual Inspection Prior to product exposure		Acceptance Criteria	Visual Inspection at the end of the product exposure		Acceptance Criteria	Pass / Fail
	Canister A	Canister B		Canister A	Canister B		
			No visible sign of damage on the membrane, canister and tubing			No visible sign of leaking (Drops coming out through the canister port and tubing)	



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

(E). Steritest Device Chemical Compatibility Verification:

Steritest Device Rinsing								
Steritest Device Catalogue Number:								
Rinse Fluid:				Lot Number:				
Test No.	Rinse Fluid Volume (ml)		Acceptance Criteria	Pass / Fail	Visual Inspection		Acceptance Criteria	Pass / Fail
	Canister A	Canister B			Canister A	Canister B		
			Ability to filter all the rinse fluid without problem				No visible Sign of damage on the membrane canister and tubing	

Visual Inspection after Product Exposure								
Steritest Device Catalogue Number:								
Contact Time:								
Test No.	Visual Inspection during the product exposure		Acceptance Criteria	Pass / Fail	Visual Inspection after product exposure		Acceptance Criteria	Pass / Fail
	Canister A	Canister B			Canister A	Canister B		
			No visible sign of leaking (Drops coming out through the canister port and tubing)				No visible Sign of damage on the membrane canister and tubing	



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

(E). Steritest Device Chemical Compatibility Verification:

Bubble Point after Product Exposure					
Steritest Device Catalogue Number:					
Lot Number	Test No.	Measured Bubble Point (mbar/psi)		Acceptance Criteria (mbar/psi)	Pass / Fail
		Canister A	Canister B		

(F). Sterility of Microbiological Media Verification:

Material Identification					
Type of Media	Catalogue Number	FTM Upper Pink Zone before Incubation ($\leq 1/2$ or $> 1/2$)	Incubation		
			Date	Temperature ($^{\circ}$ C)	Time (Days)

Vented Needle Catalogue Number:

Soyabean Casein Digest Medium Sterility Result				
Sample Number	Incubation Date	Reading Date	Result After 14 Days	
			No Growth (Pass)	Growth (Fail)



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

(G). Microbiological Media Growth Promotion Verification:

Test Result			
Medium Type	Medium Catalogue No.	Microorganisms	ATCC Number

Incubation Temperature (°C)	Incubation Time (Days)	Pharmacopoeia Specification (Days)

Medium Name (Catalogue Number)	Sample Number	Incubation Date	Result - Growth appear after				
			Reading Date	Reference Medium ⁽¹⁾ (Days)	Medium being tested (Days)	Upper Pink Zone (ETM only)	
						≤ 1/2	≥ 1/2

Controls			
Medium Type	Medium Catalogue No.	Microorganisms	ATCC Number



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

(G). Microbiological Media Growth Promotion Verification:

Control	Incubation Temperature (°C) : _____			
	Incubation Time (Days) : _____			
	Incubation Date	Reading Date	No Growth	Growth

(H). Sterility of the Steritest Device(s) and Rinse Fluid (s) Verification:
Material Identification -

Steritest Device Catalogue Number: _____			
Steritest Device Lot Number: _____			
Type of Media	Catalogue Number	FTM Upper Pink Zone before Incubation ($\leq 1/2$ or $> 1/2$)	Incubation Temperature (°C)
Fluid Name	What is the fluid used for in the internal SOP (Step Description + Rinse Fluid Volume)		

Test Result -

Steritest Canister Number: _____							
Rinse Fluid Catalogue Number: _____							
Steritest Lot Number	Incubation Date	Result After 14 days incubation					
		Reading Date	First Canister (SCD)		Second Canister (FTM)		
			No Growth	Growth	No Growth	Growth	Pink Zone $\leq 1/2$



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

**(I). Sterility of the Steritest Device(s) and Rinse Fluid (s) Verification:
Bacteriostasis and Fungistasis - (Material Identification)**

Material Identification			
Type of Media	Catalogue Number	FTM Upper Pink Zone before Incubation ($\leq 1/2$ or $> 1/2$)	Incubation Temperature ($^{\circ}\text{C}$)
Microorganisms used for the Test			ATCC No.
Steritest Device Catalogue Number		Steritest Device Lot Number	
Fluid Name	Fluid Catalogue Number	What is the fluid used for in the internal SOP (Step Description + Rinse Fluid Volume)	



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

**(I). Sterility of the Steritest Device(s) and Rinse Fluid (s) Verification:
Bacteriostasis and Fungistasis - (Test Result)**

Steritest Catalogue Number: _____						
Rinse Fluid Reference: _____						
Microorganisms: _____						
ATCC Number: _____						
Incubation Temperature (°C): _____						
Incubation Time: _____						
Steritest Lot Number	Rinse Fluid Lot Number	Incubation Date	Result			
			Reading Date	Growth observed After (Days)	Growth within specification	Pink Zone $\leq \frac{1}{2}$ (FTM only)

Steritest Catalogue Number: _____						
Rinse Fluid Reference: _____						
Microorganisms: _____						
ATCC Number: _____						
	Media	Incubation Date	Reading Date	No Growth	Growth	Pink Zone $\leq \frac{1}{2}$ (FTM only)



PHARMA DEVILS

MICROBIOLOGY DEPARTMENT

PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

(J). Pharmaceutical Product Verification: (Bacteriostasis and Fungistatis)

Microorganisms used for the Test	ATCC No.

Test Result:

Steritest Catalogue Number: _____					
Steritest Lot Number: _____					
Microorganisms: _____					
ATCC Number: _____					
Medium: _____					
Incubation Temperature ($^{\circ}\text{C}$): _____					
Incubation Time: _____					
Article Name	Incubation Date	Result			
		Reading Date	Growth Appears After (Days)	Growth within specification	Pink Zone $\leq \frac{1}{2}$ (FTM only)



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

(J). Pharmaceutical Product Verification: (Bacteriostasis and Fungistasis)

Controls:

Steritest Catalogue Number: _____						
Rinse Fluid Reference: _____						
Microorganisms: _____						
ATCC Number: _____						
Medium: _____						
	Incubation Date	Reading Date	No Growth	Growth	Pink Zone $\leq \frac{1}{2}$ (FTM only)	
Steritest Catalogue Number: _____						
Rinse Fluid Reference: _____						
Microorganisms: _____						
ATCC Number: _____						
Medium: _____						
	Time	Incubation Date	Reading Date	Growth	No Growth	Pink Zone $\leq \frac{1}{2}$ (FTM only)
	Start of Test					
	End of Test					



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

(K). System Operating Procedure Verification:

Automatic Mode:

SOP Name: _____

Step Number	Type	Speed	Times (s)	Comments

Step Number	Acceptance Criteria	Criterion Met (Yes/No)	Pass / Fail
	Appears properly on the Steritest Equinox Pump screen and conforms to the SOP loaded in the Steritest Equinox Pump		
	Appears properly on the Steritest Equinox Pump screen and conforms to the SOP loaded in the Steritest Equinox Pump		
	Appears properly on the Steritest Equinox Pump screen and conforms to the SOP loaded in the Steritest Equinox Pump		
	Appears properly on the Steritest Equinox Pump screen and conforms to the SOP loaded in the Steritest Equinox Pump		
	Appears properly on the Steritest Equinox Pump screen and conforms to the SOP loaded in the Steritest Equinox Pump		
	Appears properly on the Steritest Equinox Pump screen and conforms to the SOP loaded in the Steritest Equinox Pump		
	Appears properly on the Steritest Equinox Pump screen and conforms to the SOP loaded in the Steritest Equinox Pump		

Note:

Remarks: - Performance verification of Steritest Equinox - Complies / Does not comply.

Verification Done By: -



PERFORMANCE QUALIFICATION PROTOCOL FOR STERITEST EQUINOX

Annexure - II

List of Changes / Deviations

S.No.	Description of Change / Deviations	Justification based on impact analysis

Verified By:

Approved By: