

STANDARD OPERATING PROCEDURE			
Department: Quality Assurance	SOP No.:		
Title: Preparation of Cleaning Validation and Hold Time/Shelf Life Study Protocol and Report	Effective Date:		
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1.0 **OBJECTIVE**:

To lay down a Procedure for Preparation of Cleaning Validation and Hold Time/Shelf Life Study Protocols and Reports.

2.0 SCOPE:

This SOP is applicable for Preparation of Cleaning Validation and Hold Time/Shelf Life Study Protocols and Reports in Quality Control department at

3.0 RESPONSIBILITY:

QC (Officer/ Designee): Preparation, Revision, Retrieval and Destruction of this SOP.

4.0 ACCOUNTABILITY:

Head QC: Ensure Training and Implementation of this SOP.

5.0 **DEFINITIONS**

- **5.1 Protocol:** A Protocol is a written set of instructions broader in scope than a Standard Operating Procedure (SOP).
- **5.2 Activity:** Any monitoring or measuring or Qualification step.
- **5.3 Validation:** Documented act of proving that any Facility/Utility/Equipment/Instrument/System actually lead to expected results.
- **5.4 Modification:** Any significant change which may alter the validated state of Facility/Utility/ Equipment/Instrument/System.
- **5.5 Relocation:** Change in location of any Utility, Equipment or System.

6.0 PROCEDURE:

- 6.1 GENERAL GUIDELINES FOR PREPARATION OF CLEANING VALIDATION AND HOLD TIME/SHELF LIFE STUDY PROTOCOL AND REPORTS:
 - **6.1.1** Protocols and Reports shall be written in English Language by using Microsoft Word.





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- 6.1.2 The person performing the Process or activity of QC Department shall prepare the Protocols and Reports.
- **6.1.3** Initiator shall have adequate knowledge, Training and experience in the related Areas of activity.
- All the points in the Protocol/Report shall be numbered sequentially and sub paragraph of the Protocol/Report be also numbered sequentially with an incremental number derived from the heading number. Bullets may be use for sub paragraph of Protocol/Report.
- **6.1.5** Initiator shall check the completeness of draft Protocols and Reports and send to the Head of the Department for review.
- 6.1.6 Protocols and Reports shall have reference of related document such as Pharmacopoeia and Guidelines published by various Regulatory Authorities. Wherever necessary illustrations and drawing shall be indicated to provide better clarity and understanding of the Process / System.
- 6.1.7 The reviewer shall check the adequacy, accuracy, correctness and completeness of draft Protocols and Reports.
- **6.1.8** Upon receipt of the comments (if any), same shall be reviewed and incorporated in the Protocols and Reports.
- **6.1.9** Final copy of protocol & report shall be provided to QA.
- 6.1.10 All Protocols and Reports shall be prepared by Operating Officer/Executive of QC Department and Checked by QC, Head of Department/Designee.
- 6.1.11 Upon signature of Respective concerned persons, signed off copy of Protocol & Report shall be sent to Department Head for review by and Final approved by Head QA.

6.1.11.1 Cleaning Validation Protocol:

Cleaning Validation Protocol shall be prepared as per Annexure-I. Cleaning Validation Protocol shall contain the following Contents but not limited to:

- 1. Document Preparation and Approval
- 2. Objective
- 3. Scope





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- **4.** Responsibility
- **5.** Execution Team
- **6.** Cleaning Methodology
- 7. Validation Approach
- **8.** Validation Data
- **9.** Sampling Procedure Analysis Methodology
- **10.** Pre-Validation Study
- 11. List of Materials to be used for cleaning validation
- 12. Establishment of Acceptance Criteria
- **13.** Failure Investigation and Corrective Action
- **14.** Documentation
- **15.** Re-validation Criteria
- **16.** Summary
- 17. Conclusion
- 18. Reference
- **19.** Abbreviation
- **20.** List of Annexures
- **21.** Revision History

6.1.11.2 Hold Time Study Protocol:

Hold Time Protocol shall be prepared as per Annexure-II Hold Time Study Protocol shall contain the following Contents but not limited to:

- 1. Document Preparation and Approval
- 2. Objective
- 3. Scope
- **4.** Qualification Team & Responsibilities
- **5.** Procedure
- **6.** Establishment of Acceptance criteria
- **7.** Failure Investigation and Corrective Action
- **8.** Documentation
- **9.** Re-validation Criteria



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- **10.** Summary
- 11. Conclusion
- 12. Reference
- **13.** Abbreviation
- **14.** Revision History

6.1.12 PREPARATION OF VALIDATION AND HOLD TIME STUDY REPORT:

6.1.12.1 All Validation and Hold Time Study Reports shall be prepared as per format as shown in Annexure-III (Cleaning Validation) and Annexure-IV (Hold Time/Shelf Life Study). The format of Validation / Re-Validation Report shall contain the following information mention in 6.2.11.2

6.1.12.2 Cleaning Validation Report:

Cleaning Validation Report shall contain the following Contents but not limited to:

- 1. Objective
- 2. Scope
- 3. Qualification Team & Responsibility
- 4. Execution Team
- 5. Cleaning Methodology
- 6. Validation Approach
- 7. Sampling Procedure Analysis Methodology
- 8. Observations
- **9.** Acceptance Criteria
- **10.** Reference
- 11. Document Attachment
- **12.** Deviation (If any)
- 13. Change Control (if any)
- **14.**Summary
- 15. Conclusion
- **16.** Approval of Report
- 17. Abbreviation



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18. Revision History

6.1.12.3 Hold Time Study Report:

Hold Time Study Report shall contain the following Contents but not limited to:

- 1. Objective
- 2. Scope
- **3.** Qualification Team and Responsibility
- 4. Execution Team
- **5.** Procedure
- **6.** Observations
- 7. Acceptance Criteria
- 8. Reference
- 9. Document Attachment
- **10.** Deviation (If any)
- 11. Change Control (if any)
- **12.** Summary
- 13. Conclusion
- 14. Approval of Report
- 15. Abbreviation
- **16.** Revision History

6.1.13 Numbering System of Protocols and Reports:

- **6.1.13.1** All Protocols and Reports should have a unique Reference Number, which shall identify that document.
- **6.1.13.2** The numbering system of Cleaning Validation Protocol shall be as follows:

PD/CVP/QC/XXX, where

PD	-	
/	-	Slash
CVP	-	Cleaning Validation protocol
/	-	Slash
OC	_	Ouality Control



Department: Qu	ality Assur	ance	D I I I I	NDARD OPERATING PROCEDURE	SOP No.:
			idation	and Hold Time/Shelf Life Study Protocol	Effective Date:
and Report					
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issue Dute.	/	_	Slas	sh.	1 uge 110
	XXX				2 ata
	ΛΛΛ	-	UIII	que Sequential Number for eg 001, 002, 003	s etc.
6.1.13.3	The num	bering	system	of Hold Time Study protocol shall be as fo	llows:
	PD/HTP/QC/XX/YYY, where				
	PD	_			
	/		-	Slash	
	HTP		-	Hold Time Protocol	
	/		-	Slash	
	QC		_	Quality Control	
	/		_	Slash	
	XX		_	Unique code for Hold Time Study	
	/		_	Slash	
	YYY		-	Unique Sequential Number for e.g. 001,	002, 003 etc
6.1.13.4	The num	bering	system	of Cleaning Validation Report shall be as f	ollows:
	PD/CVI	_	-		
	PD	-	ŕ		
	/	_	Slas	sh	
	CVR	_		aning Validation report	
	/	_	Slas		
	QC	_		lity Control	
	/	_	Slas	·	
	XXX	_		que Sequential Number for eg 001, 002, 003	3 etc
6.1.13.5	The num	bering		of Hold Time Study Report shall be as follows:	
	PD/HTR/QC/XX/YYY, where				
	PD	-			
	/	_	Slas		
	,		Dias	· · · · · · · · · · · · · · · · · · ·	

Hold Time Report

HTR



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/ - Slash

QC - Quality Control

/ - Slash

XX - Unique Code for Hold time study (for e.g. Volumetric Solution as "VS")

- Slash

YYY - Unique Sequential Number for e.g. 001, 002, 003 etc

6.1.13.6 Once a number is assigned to any Protocol and Report, the same number shall not be assigned to any other Protocols and Reports.

7.0 ABBREVIATIONS:

AHU Air Handling Unit

API Active Pharmaceutical Ingredients

HPLC High Performance Liquid Chromatography

ID No. Identification Number

Ltd. Limited
Pvt. Private

QA Quality Assurance
QC Quality Control

SOP Standard Operating Procedure

8.0 ANNEXURES:

ANNEXURE No.	TITLE OF ANNEXURE	FORMAT No.
Annexure-I	Cleaning Validation Protocol (Specimen)	
Annexure-II	Hold Time Study Protocol (Specimen)	
Annexure-III	Cleaning Validation Report (Specimen)	
Annexure-IV	Hold Time Study Report (Specimen)	

9.0 **DISTRIBUTION:**

Controlled Copy Quality Control Department



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10.0 REFERENCES:

> In-House

11.0 REVISION HISTORY:

Revision No.	Change Control No.	Details of Changes	Reason of changes	Effective Date	Done By
00	Not Applicable	Not Applicable	New SOP		



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ANNEXURE-I

CLEANING VALIDATION PROTOCOL	PROTOCOL No.: PD/CVP/QC/XXX REVISION No. XX EFFECTIVE DATE: PAGE No.: X of Y
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2.	Objective	
3.	Scope	
4.	Responsibility	
5.	Execution Team	
6.	Cleaning Methodology	
7.	Validation Approach	
8.	Validation Data	
9.	Sampling Procedure Analysis Methodology	
10.	Pre-Validation Study	
11.	List of Materials to be used for cleaning validation	
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15.	Re-validation	
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19.	Abbreviation	
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21.	Revision History	



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1.0 DOCUMENT PREPARATION AND APPROVAL

Preparation and Approval of Cleaning Validation Protocol will be joint responsibility of the following function area. Any modification in this document shall be documented and approved.

PREPARED BY:

DESIGNATION	NAME	SIGNATURE	DATE
OFFICER/EXECUTIVE			
(QUALITY CONTROL)			

REVIEWED BY:

DESIGNATION	NAME	SIGNATURE	DATE
EXECUTIVE/MANAGER			
(QUALITY CONTROL)			
OFFICER/EXECUTIVE			
(QUALITY ASSURANCE)			
HEAD			
(QUALITY CONTROL)			

APPROVED BY:

DESIGNATION	NAME	SIGNATURE	DATE
HEAD			
(QUALITY ASSURANCE)			

BODY OF PROTOCOL AS PER CONTENT DESCRIBED IN POINT NO. 6.1.11.1



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ANNEXURE-II

HOLD TIME STUDY PROTOCOL	PROTOCOL No.: PD/HTP/QC/XX/YYY REVISION No. XX EFFECTIVE DATE: PAGE No.: X of Y
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- 8.0 DOCUMENTATION
- 9.0 REVALIDATION CRITERIA
- 10.0 SUMMARY
- 11.0 CONCLUSION
- 12.0 REFERENCE
- 13.0 ABBREVIATION
- 14.0 REVISION HISTORY



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PROTOCOL APPROVAL

Name	Designation	Signature	Date
Prepared By			
Checked By			
Reviewed By		<u>'</u>	
Approved By			

BODY OF PROTOCOL AS PER CONTENT DESCRIBED IN POINT NO. 6.1.11.2



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ANNEXURE-III

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8.0	OBSERVATIONS	
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12.0	DEVIATION (IF ANY)	
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15.0	CONCLUSION	
16.0	APPROVAL OF REPORT	
17.0	ABBREVIATION	
18.0	REVISION HISTORY	

BODY OF REPORT AS PER CONTENT DESCRIBED IN POINT NO. 6.2.11.2



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ANNEXURE-IV

HOLD TIME STUDY
REPORT

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EFFECTIVE DATE:

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DOCUMENT PREPARATION AND APPROVAL

The document is relevant to Shelf life study report held in QC Dept.

PREPARED BY:

DESIGNATION	NAME	SIGNATURE	DATE
OFFICER/EXECUTIVE (QUALITY CONTROL)			

REVIEWED BY:

DESIGNATION	NAME	SIGNATURE	DATE
EXECUTIVE/MANAGER (QUALITY CONTROL)			
OFFICER/EXECUTIVE (QUALITY ASSURANCE)			
HEAD (QUALITY CONTROL)			

APPROVED BY:

DESIGNATION	NAME	SIGNATURE	DATE
HEAD (QUALITY ASSURANCE)			

BODY OF REPORT AS PER CONTENT DESCRIBED IN POINT No. 6.2.11.3