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VALIDATION PROTOCOL

FOR

HOLD TIME STUDY OF CLEANED & DRIED ARTICLES

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1.0 APPROVAL SIGNATURE:

This is specific protocol for Hold time study validation of Cleaned & Dried articles which will be used in the Aseptic area after sterilization. The Author signature indicates that this document has been prepared in accordance with existing standards and adequately reflects the tasks and deliverables necessary for this validation.

Prepared by / Functional area	Designation	Signature	Date

The reviewer's signature indicates that, this document has been reviewed and it accurately and completely reflects the tasks and deliverables necessary for process.

Checked by / Functional area	Designation	Signature	Date

The approver's signature indicates that the documentation and information contained herein complies with applicable regulatory, corporate, divisional/departmental requirements, and current Good Manufacturing Practices.

Approved by / Functional area	Designation	Signature	Date

2.0 OVERVIEW:

2.1 Objective:

To ensure the Cleaning procedure of Filling Machine parts is adequate.

2.2 Purpose & Scope:

The purpose is to provide an outline for the testing of cleaned & dried articles used in the aseptic area of the Production Formulation.

2.3 Responsibility:

To conduct the qualification study, a team shall be formed. The team shall contain the members from the, Quality Control and Quality Assurance departments. The Validation team is described through the following responsibility.

Production Formulation	To prepare protocol
	To provide training
Engineering & Maintenance, Production Formulation, Production Bulk, Quality Control and Quality Assurance	To review the protocol
	To assure the adequate functioning of system
	To conduct the qualification study
	To record the qualification test.
QA Head	To approve the validation protocol
	To approve the validation report

3.0 EXECUTION TEAM:

Following personnel shall be responsible for the execution of qualification study;

Executive – QC (Microbiology) : To conduct & record the qualification study as per protocol.
Executive – PF : To provide material for testing.
Executive – Quality Assurance : To review & monitor the qualification study.

4.0 TRAINING RECORD:

4.1 Purpose:

The purpose of the training is to familiarize the trainees with the requirement of Hold time study of cleaned articles to be used in the aseptic area after sterilization.

4.2 Scope:

This Training is applicable to the all concerned persons who are involved in this activity.

4.3 Topics:

The following topics shall be covered during training:

4.3.1 Purpose & procedure of Hold time Study validation.
4.3.2 Identifying the responsibility of involved person.
4.3.3 Documentation practices to be followed.
4.3.4 General precautions / guidelines to be followed during qualification.
4.3.5 Attach training record with the report as .

5.0 REQUIREMENTS FOR QUALIFICATION:

5.1 Following items shall be required for the execution of Hold Time study validation:

5.1.1 Sterile swabs.
5.1.2 Preincubated Soyabean Casein Digest Agar (SCDA)
5.1.3 Sterile forceps
5.1.4 0.9% sodium chloride solution
5.1.5 Sterile membrane filtration units.
5.1.6 Sterile membranes filters
5.1.7 Cyclo Mixer
5.1.8 Cleaned machine parts
5.1.9 Manifold
5.1.10 RODAC plates
5.1.11 LAL reagent

6.0 SYSTEM/ EQUIPMENT DESCRIPTION:

The validation will be performed for the following Articles:

6.1 Filling machine parts

7.0 QUALIFICATION PROCEDURE OR METHODOLOGY:

7.1 General Recording Instructions:

7.1.1 Read the contents of the document thoroughly before proceeding for Execution of the activity (in case of doubts/contradictions/contact the approvers of the document for clarifications).
7.1.2 Recording of all the observations and data shall be as per good documentation practices **SOP**.
7.1.3 Recording will be done on controlled copy of Hold Time Study validation protocol annexure.

7.2 General Safety Instruction for Execution:

Safety will be one of the key considerations during the execution of this document. The following guidelines must be observed during the execution stage.

7.2.1 All personnel involved with the execution shall identify hazards associated with performance of testing and precautions to be taken.

7.2.2 All personnel involved with the execution shall check that utilities are safely isolated when energizing or de-energizing.

7.2.3 All personnel involved in the execution shall inform the company management any hazard, to themselves or others, associated with the materials, equipment, method of working and the precautions to be taken.

7.3 Machine Parts:

7.5.1 Clean the Filling machine parts as per SOP.

7.5.2 After cleaning with WFI take rinse sample of machine parts in depyrogenated vials.

7.5.3 Microbiologist shall perform the surface monitoring of the cleaned filling machine parts under LAF, with the help of RODAC plates and sterile swabs as per SOP.

7.5.4 After performing the sampling, disinfectant the surface from where the sample has been taken with a sterile lint free mop soaked with 70% IPA. (Mark the surface with marker from where surface monitoring is done & don't perform the surface monitoring again from marked surface.)

7.5.5 This shall be considered as the '0 hour' monitoring.

7.5.6 After performing the monitoring for zero hour, the machine parts shall be placed under unidirectional air flow for further time period.

7.5.7 The monitoring shall be performed on all the machine parts at 12, 24 hrs, 48 hrs and 72 hrs. Intervals.

7.5.8 Bring the samples to microbiology lab and incubate the RODAC plates at specified temperatures & perform BET testing for rinse sample.

NOTE: BET testing to be performed at zero & 72 hours only. Bioburden testing to be performed at 0, 12, 24, 48, 72 hours.

7.5.9 Perform the membrane filtration of the swabs and then transfer the membrane filter on to a sterile preincubated SCDA plate and incubate the plate at 20-25°C for 3 days and at 30-35°C for further 2 days.

7.5.10 For BET testing treat the rinse sample with LAL reagent & Record the observation.

7.5.11 The results shall be observed and recorded as per **Annexure – 00.**

8.0 ACCEPTANCE CRITERIA:

8.1 For Bioburden count should not be more than 10 cfu/100ml.

8.2 For BET testing endotoxin units observed should not be more than 0.25EU/ml.

9.0 OBSERVED DEVIATION (IF ANY):

The deviation/discrepancy shall be addressed as per the **SOP** "Deviation Management".

10.0 QUALIFICATION REPORT:

The qualification report shall consist of a summary document, in narrative form, which shall briefly describe the activity performed along with the observations recorded in relevant exhibits.
This report shall also include the related documents and attachments/annexure which were completed at the time of qualification activity.

11.0 ABBREVIATIONS:

11.1 SCDA **:** Soyabean Casein Digest Agar
11.2 LAF **:** Laminar Air Flow
11.3 CFU **:** Colony Forming Unit
11.4 IPA **:** Iso Propyl Alcohol
11.5 RODAC : Replicate Organism Detection and Count

12.0 LIST OF ANNEXURES:

Annexure No.	Annexure Title

13.0 REFERENCE DOCUMENT:

Nil