PHARMA DEVILS

PRODUCTION DEPARTMENT

STANDARD OPERATING PROCEDURE				
Department: Production (External Preparation)	SOP No.:			
Title: Operation and Cleaning of Liquid Manufacturing Tank 2000 Ltr. Effective Da				
Supersedes: Nil	Review Date:			
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1.0 OBJECTIVE:

To lay down a Procedure for Operation and Cleaning of Liquid manufacturing tank 2000 Ltr.

2.0 SCOPE:

This SOP is applicable to Operation and Cleaning of Liquid manufacturing tank in Ointment Section.

3.0 RESPONSIBILITY:

Production- Officer / Executive.

4.0 ACCOUNTABILITY:

Head- Production

5.0 ABBREVIATIONS:

BPCR Batch Production and Control Record

IPQA In-Process Quality Assurance

RM Raw Material

SOP Standard Operating Procedure

RH Relative Humidity

VFD Variable frequency Drive

RM Raw Material

Hrs Hours

SS Staleness steel

6.0 PROCEDURE:

6.1 GENERAL REQUIREMENT:

- **6.1.1** Check the cleanliness of Liquid manufacturing tank.
- **6.1.2** Check the "CLEANED" status label on Liquid manufacturing tank.
- **6.1.3** Ensure that the Environmental Conditions are as per specification in BPCR and enter the same into BPCR as well as in Environmental Monitoring Record (Temperature NMT 25°C & RH NMT 65%).
- **6.1.4** Remove the "CLEANED" status label from Equipment and place Equipment "INPROCESS STATUS" label on it. Line Clearance from IPQA.

6.2 OPERATION:

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- **6.2.1** Switch "ON" the Main power supply of Liquid manufacturing tank.
- **6.2.2** Set the speed in VFD of Liquid manufacturing tank as per requirement.
- **6.2.3** Start the mixing of RM by Stirrer.
- **6.2.4** After completion of Batch transfer into holding tank.
- **6.2.5** Switch "OFF" the stirrer after completion of the Batch and affix a "TO BE CLEANED" status label on it.
- **6.2.6** Make an entry of Operation Time in BPCR and "Equipment Log".

6.3 CLEANING:

- 6.3.1 A Type Cleaning (Batch to Batch & Sift End Cleaning):
- **6.3.1.1** Ensure that the External Liquid manufacturing tank shall have "TO BE CLEANED" status label.
- **6.3.1.2** Remove the "TO BE CLEANED" status label
- **6.3.1.3** Wash the External Liquid manufacturing tank with Purified Water.
- **6.3.1.4** Dry mop the External Liquid manufacturing tank with Lint Free cloth on outer surface.
- **6.3.1.5** Affix a "CLEANED" status label on the External Liquid manufacturing tank.
- **6.3.1.6** Make an entry of Cleaning Time in "Equipment Log".
- 6.3.1.7 A Type Cleaning is to be done.
 - **Batch to Batch changeover of the same product.**
 - > Change over to higher strength of same colour.
 - At the end of the Shift.

6.3.2 B Type Cleaning (Product to Product Cleaning)

- **6.3.2.1** Ensure that the External Liquid manufacturing tank shall have "**TO BE CLEANED**" status label.
- **6.3.2.2** Remove the "TO BE CLEANED" status label.
- **6.3.2.3** Wash and Flush the External Liquid manufacturing tank with Hot Purified Water.
- **6.3.2.4** Use Extran MA 02 solution 2% v/v. after finally rinse three times with purified water.
- **6.3.2.5** Dry mop the External Liquid manufacturing tank with lint free cloth on outer surface.
- **6.3.2.6** Affix a "CLEANED" status label on the External Liquid manufacturing tank.

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6.3.2.7 Make an Entry of Cleaning Time in "Equipment Log".

6.3.2.8 B-Type Cleaning is to be done.

- After 48 hrs. of type A-Type cleaning.
- Product Change Over.
- Change over to Lower strength of same product.
- After maintenance or major breakdown.
- Change over to upper strength with different colour.
- If the Equipment is not used within 72 hrs. clean the equipment before use.
- After every 5 batches of same product in case of campaign product.

7.0 ANNEXURES:

Not Applicable.

ENCLOSURES: SOP Training Record

8.0 DISTRIBUTION:

• Controlled Copy No. 01 Quality Assurance

• Controlled Copy No. 02 Production

• Master Copy Quality Assurance

9.0 REFERENCES:

Machine -Manual

10.0 REVISION HISTORY:

CHANGE HISTORY LOG

Revision No.	Change Control No.	Details of Changes	Reason for Change	Effective Date	Updated By