

PRODUCTION DEPARTMENT

#### STANDARD OPERATING PROCEDURE

Department: Production	SOP No.:
Title: Operation and Cleaning of Planetary Mixer	Effective Date:
Supersedes: Nil	<b>Review Date:</b>
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# **1.0 OBJECTIVE:**

To lay down a Procedure for Operation and Cleaning of Planetary Mixer.

# **2.0 SCOPE:**

This SOP is applicable to Operation & Cleaning of Planetary Mixer used in Soft Gelatin Capsule section.

# **3.0 RESPONSIBILITY:**

Officer / Executive Production

# 4.0 ACCOUNTABILITY:

Head Production

# 5.0 ABBREVIATIONS:

BMR	Batch Manufacturing Record
IPA	Isopropyl Alcohol
Ltd.	Limited
PLM	Planetary Mixer
Pvt.	Private
QC	Quality Control
SOP	Standard Operating Procedure

# 6.0 **PROCEDURE**:

# 6.1 **OPERATION:**

- **6.1.1** Ensure that the equipment & area is cleaned.
- 6.1.2 Take the line clearance from QA as per "Line Clearance" SOP and enter the details in BMR.
- 6.1.3 Affix the status label on the machine.
- **6.1.4** Ensure that the temperature and humidity of area is within limit as specified in BMR.
- **6.1.5** Switch 'ON' the PLM and lift the stirrer by turning the Knob switch anticlockwise to up position.
- **6.1.6** Load the medicament in PLM Bowl.
- 6.1.7 Take the PLM Bowl below stirrer and adjust the position.
- **6.1.8** Take down the stirrer by turning the knob switch clockwise direction to down position.
- 6.1.9 Switch 'ON' the stirrer by pressing the slow/fast push button and set the time on timer as



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#### specified in BMR.

- **6.1.10** Switch 'ON' the vacuum pump and open the vacuum valve upto 650 to 715 mm/Hg for deaeration of medicament or as defined in BMR.
- 6.1.11 After completion of mixing switch 'OFF' the stirrer by pressing "Red" push button.
- 6.1.12 Open the vacuum valve and release the vacuum.
- **6.1.13** After completion of process lift the stirrer by turning the Knob switch anticlockwise to up position.
- **6.1.14** Take out the PLM bowl from the PLM.
- 6.1.15 Enter the operation details in "Machine Utilization Record"

# 6.2 CLEANING:

# 6.2.1 For Product Changeover (Type B Cleaning):

- 6.2.1.1 Ensure that mains switch is "OFF".
- 6.2.1.2 Dismantle the stirrer and PLM Bowl of PLM and take to washing area.
- **6.2.1.3** Clean it with 2 %v/v of Extran MA-02 solution.
- **6.2.1.4** Wash with sufficient quantity of potable water.
- 6.2.1.5 Finally rinse with sufficient quantity of purified water.
- **6.2.1.6** Wipe the stirrer and PLM Bowl with dry lint free cloth and finally mop with 70% v/v IPA solution.
- **6.2.1.7** Put the stirrer in a SS tray.
- **6.2.1.8** Officer/Executive QA shall check visually & collect the swab sample with intimation slip cum analysis report and send to QC for analysis.
- **6.2.1.9** Use the PLM after receiving swab test intimation slip cum analysis report from QC showing negative identification.
- **6.2.1.10** Assemble the stirrer in PLM.
- 6.2.1.11 Clean the remaining part of PLM with the help of wet cloth followed by lint free cloth.
- 6.2.1.12 Mop the PLM with 70% v/v IPA solution.
- 6.2.1.13 Affix a label as "Cleaned" on the PLM.
- 6.2.1.14 Enter the cleaning details in "Machine Utilization Record"
- 6.2.2 For Batch Changeover (Type A Cleaning) :

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# **6.2.2.1** Clean the PLM by mopping with dry lint free cloth.

**6.2.2.2** Mop the PLM with 70% v/v IPA solution.

- **6.2.2.3** Affix the status label on the PLM.
- 6.2.2.4 Enter the cleaning details in "Machine Utilization Record".

# 6.2.3 Frequency of Cleaning:

# **6.2.3.1 For B Type Cleaning:**

- (a) Product to Product Changeover.
- (b) After 5 batches of the same product.
- (c) If cleaned equipment is kept idle more than 72 hours.
- (d) If Dirty equipment is kept idle more than 24 hours.
- (e) After any Maintenance of Product Contact Parts.
- (f) Changeover of one Batch to Next Batch of the same Product with Descending Potency.

#### 6.2.3.2 For A Type Cleaning:

- (a) Changeover from one Batch to Next Batch of the same Product with Same Potency.
- (b) Changeover from one batch to next Batch of the same Product with Higher Potency.

# 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:**

Not Applicable.



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# **10.0 REVISION HISTORY:**

# **CHANGE HISTORY LOG**

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