



**Title:** Operation and Maintenance of Water Purification System

<b>SOP No.:</b>		<b>Revision No.:</b>	00
<b>Effective Date:</b>		<b>Supersedes No.</b>	Nil
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## 1.0 PURPOSE

To lay down the procedure for the operation and Maintenance of Water Purification system.

## 2.0 SCOPE

This is applicable to Quality Control Department

S.No	Equipment ID	Make	Sampling Point No	Equipment Model
1		Millipore		<i>Milli Q</i>
2		Millipore		<i>Elix</i>
3		Millipore		<i>Elix</i>

## 3.0 RESPONSIBILITY

Microbiologist

## 4.0 PROCEDURE

### 4.1 Operating Procedure for Elix:

- 4.1.1 Put on the main switch, which is located at the backside of the Elix by this green indicator light indicates that power supply is ON.
- 4.1.2 The system displays STANDBY and FLUSH.
- 4.1.3 Press continuously OPERATE / STANDBY button located on the front panel of the system.
- 4.1.4 The system displays OPERATE and FLUSH.
- 4.1.5 After the completion of flush cycle the system produces purified water and is stored in the reservoir.
- 4.1.6 Once the tank is full the system displays TANK FULL and Elix system stops.
- 4.1.7 If water level is decreases in the reservoir, Elix will operate to transfer water to reservoir.

### 4.2 Operating procedure for Reservoir:

Before collection of the water from the tap provided in the reservoir make sure that the reservoir tank contains sufficient water by confirming with the display of Elix (minimum of 20%)



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### 4.3 Operating procedure for Milli-Q A10 Gradient:

- 4.3.1 Put on the main switch, which is located at the backside of the Milli-Q A10. Green indicator light glows, indicates that power supply is ON.
- 4.3.2 The system will display PREOPERATE/STANDBY.
- 4.3.3 To change PREOPERATE/STANDBY mode press continuously OPERATE / STANDBY button, which is located on the front side of the panel.
- 4.3.4 Make sure that system is in PREOPERATE mode.
- 4.3.5 To collect the water move the trigger on the dispenser towards downward direction.
- 4.3.6 After collection of water from the system, push the trigger back to upward direction to stop the water.

### 4.4 System Routine Maintenances:

#### 4.4.1 Cleaning Procedure of Reservoir:

- 4.4.1.1 Drain the water present in the reservoir tank by opening the tap provided to the reservoir. Opening the knob of reservoir situated at the bottom, which is blue in colour shall drain off the remaining water.
- 4.4.1.2 Completely drain the water from the reservoir.
- 4.4.1.3 Frequency: Weekly.

#### 4.4.2 Chlorine Cycle Procedure:

- 4.4.2.1 Put the system in standby mode by continuously pressing the OPERATE / STANDBY button located on front side of the panel of Elix system.
- 4.4.2.2 Open the lid of the system and put one chlorine tablet in it and then close the lid.
- 4.4.2.3 Push the cleaning button for 10 seconds.
- 4.4.2.4 "Cl<sub>2</sub> Clear" will appear on the screen. Then instrument shows "15 mm" and subsequently it shows the time laps. Cycle time is 15 minutes.



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4.4.2.5 After the completion of the Chlorine cycle the system produces purified water and is stored in the reservoir.

4.4.2.6 Frequency for Chlorine cleaning cycle: Once in a month.

## 4.5 System Break Down Maintenances:

S.No.	Indication/Display	Action
1	“Low Pressure” display on the screen	<ul style="list-style-type: none"><li>• Ensure the feed water valve is open</li><li>• Ensure that the feed pressure is above 0.5bar</li><li>• Check the requirement for Replacement of the Pre-filter</li><li>• If the stand by pressure is below 0.5 bar replace the PROGARD</li></ul>
2	“Exchange Pack” light is constantly illuminated	Put the system in the “STANDBY” mode remove the PROGARD and place it back
3	“Start Auto Clean” display on the screen	Follow the routine maintenances procedure for sanitization.
4	“%Reject < SP” display	Replace the RO cartridge.
5	“Product < SP” display	Call Millipore Service engineer

4.6 **Note:** The complete analysis of water should be done according to purified water on monthly basis ( $\pm 3$  days).

## 5.0 ANNEXURE / ATTACHMENTS

Annexure I: Form 1-Cleaning Cycle Record.

Annexure II: Form 2-Cartridge replacement record.

## 6.0 REVISION LOG

Revision Number	Effective Date	Reason for Revision