

MICROBIOLOGY DEPARTMENT

STANDARD OPERATING PROCEDURE

Title: Cleaning, Calibration and Operation of M Air T Air Sampler

| SOP No.: | | Department: | Microbiology |
|-------------------------|-----|------------------------|--------------|
| SOF No.: | | Effective Date: | |
| Revision No.: | 00 | Revision Date: | |
| Supersede Revision No.: | Nil | Page No.: | 1 of 4 |

1.0 OBJECTIVE

To lay down procedure for cleaning, calibration and operation of M Air T air sampler.

2.0 SCOPE

This SOP is applicable for all the M Air T air samplers, Make - Millipore, used in microbiology laboratory.

3.0 RESPONSIBILITY

Prepared by - Executive Microbiology

Checked by - Assistant Manager Microbiology / QC

Approved by - Head QA, QC

4.0 PROCEDURE

4.1 Placing the Petri plate in the sampler

- 4.1.1 Unlock and remove the micro perforated sieve from the tester.
- 4.1.2 Remove the cover from the sieve. Autoclave the sieve for 30 min. at 121°C and sanitize the external surface of the tester with alcohol.
- 4.1.3 Position the wings of the cassette into the recessed area of the tester head.
- 4.1.4 Return the cassette in position by holding on to its wings. Remove the lid and place it on the bench, internal face down.
- 4.1.5 Lock the micro perforated sieve into position.

4.2 Switching the Machine ON

- 4.2.1 Push the ON/OFF button to switch ON the machine.
- 4.2.2 After the machine is switched ON previously sampled air volume will be displayed on the display.

4.3 Setting the cycle parameters

- **4.3.1** Adjusting the volume -
- 4.3.1.1 To set the volume push the LITRES button, the previously selected volume appears on the display.
- 4.3.1.2 To access other preset volumes press the litre button once preset volumes are 25L, 50L, 100L, 250L, 500L, 750L, and 1000L.



MICROBIOLOGY DEPARTMENT

STANDARD OPERATING PROCEDURE

Title: Cleaning, Calibration and Operation of M Air T Air Sampler

| SOP No.: | | Department: | Microbiology |
|-------------------------|-----|------------------------|--------------|
| SOF No.: | | Effective Date: | |
| Revision No.: | 00 | Revision Date: | |
| Supersede Revision No.: | Nil | Page No.: | 2 of 4 |

- 4.3.1.3 To change the preset volume that is required then hold the litres button down until the tester display indicates the desired sampling volume.
- 4.3.1.4 Preset sampling volumes available are

1000L

- **4.3.2** Adjusting the Timer -
- 4.3.2.1 To modify the setting, hold down the START /DELAY \tagbeta button. The display shows previously selected value and starts to count sown the time (LCD displays flashes).
- 4.3.2.2 Time can be changed in increments of 5 minutes up to one hour.
- 4.3.2.3 To validate and start the count, press down the START/DELAY button again.
- 4.3.2.4 To stop, press the ON/OFF button.

4.4 Starting the cycle

- 4.4.1 After setting the sampling parameter and timer press the START /DELAY button twice.
- 4.4.2 Perform the air sampling in the pre- defined approved locations as per the Environment monitoring SOP.
- 4.4.3 Perform the air sampling at workbench level.
- 4.4.4 When the display indicates EOC (End of cycle), unlock the sieve, remove it, and put the lid back on the cassette.
- 4.4.5 To remove the cassette from the tester head lift the cassette while lift the cassette while finally holding the edge.
- 4.4.6 Label the date, location no., done by, media used and shift on the cassette and incubate in the upside down position.



MICROBIOLOGY DEPARTMENT

STANDARD OPERATING PROCEDURE

Title: Cleaning, Calibration and Operation of M Air T Air Sampler

| SOP No.: | | Department: | Microbiology |
|-------------------------|-----|------------------------|--------------|
| SOF NO.: | | Effective Date: | |
| Revision No.: | 00 | Revision Date: | |
| Supersede Revision No.: | Nil | Page No.: | 3 of 4 |

4.5 Calibration

Calibration is done by supplier at least once in a year.

4.6 Cleaning

- 4.6.1 Clean the micro perforated sieve with 70% IPA or autoclaved before use.
- 4.6.2 Decontaminate with alcohol, Quaternary ammonium or 250-ppm bleach.

5.0 SAFETY & PRECAUTIONS

- 5.1 Do not use oxidizing agents such as hydrogen peroxide or per acetic acid.
- 5.2 Do not use bleach solution for cleaning.
- 5.3 Avoid spraying liquids into the tester.
- 5.4 Do not autoclave or flame the entire tester.
- 5.5 The stainless steel micro perforated sieve can be autoclaved without its cover.
- 5.6 Do not open the tester head.

6.0 REVISION HISTORY

| Revision No. | Reason for Revision | Superseded from & date |
|--------------|---------------------|---------------------------|
| 00 | First Issue | |

7.0 REFERENCES

Not applicable.

8.0 ABBREVIATIONS

SOP : Standard Operating Procedure

% : Percentage

IPA : Iso Propyle Alcohol

°C : Degree centigrade

ppm : Part per million

L : Liter



MICROBIOLOGY DEPARTMENT

STANDARD OPERATING PROCEDURE

Title: Cleaning, Calibration and Operation of M Air T Air Sampler

| SOP No.: | | Department: | Microbiology |
|-------------------------|-----|------------------------|--------------|
| SOF No.: | | Effective Date: | |
| Revision No.: | 00 | Revision Date: | |
| Supersede Revision No.: | Nil | Page No.: | 4 of 4 |

9.0 ANNEXURES

Not applicable