



Microbiology Sampling Protocol

For use with M2 Multi-Mold Cassettes

This is a general list of procedures to follow in order to ensure quality and accuracy of analysis. Please refer to the User Manual of the cassette and / or pump for a complete list of instructions.

Field Equipment: Calibrated Pump and Timer
 M2 Multi-Mold Cassettes
 Permanent marker

- 1) Before testing, be sure the flow rate of your pump is calibrated to 15 L/min* using a rotameter (refer to owner's manual of pump for any special calibration methods). Also, be sure that the cassettes are not expired and have been stored in "a clean, dry environment at room temperature".
- 2) Be sure to have at least three extra samples for each job: one for outside sample(s), one for a non-complaint / non-suspect area (if possible), and one for a blank sample. As a general rule, use at least one air cassette for every 1,000 square feet of space to be tested.
- 3) Using a permanent marker, write a unique sample number or the location of sampling on the side of the cassette.
- 4) Once you are ready to sample, remove (and retain) the vacuum cap from the bottom of the M2 cassette, and connect the pump tubing to the vacuum port. Then, remove and retain the cap(s) from either Side A or Side B (or both sides if pulling samples simultaneously). Refer to the user manual as needed.
- 5) Determine the appropriate sampling duration.*
- 6) Turn the pump on and sample for 10 minutes, 5 minutes, or 1 minute based on the cleanliness of the environment.*
- 7) Turn off the pump, remove the cassette from the tubing, and replace the caps on the cassette. NOTE: Do not pull the tubing off the cassette while the pump is on; this may cause a suction pull to crush the slide inside the cassette.



8) Write the sample information on the SanAir Technologies Laboratory Chain-of-Custody:

Sample Number (i.e. a unique sample number or the serial number of each cassette)

Sample Identification (e.g. location of sampling, unique sample identification number, cassette serial number). Be sure to clearly designate which sample location is on the A side and which is on the B side.

Sample Type (AC)

Analysis Type (A1 or A2)

Turn-Around-Time (3, 6, 24, or 48 hours)

Total Volume: Total Volume in Liters is equal to the flow rate of your pump (e.g. 15 L/min) multiplied by the duration of sampling (e.g. 5 minutes). For example, an air cassette sample that was pulled for 5 minutes on a pump calibrated to 15L/min would

have a total volume of 75 L/min ($15 \text{ L/min} \times 5 \text{ min} = 75 \text{ L/min}$)

Time (Start – Stop): In order to keep track of the duration of sampling, the start and stop times of sampling (or the total time for sampling) may be noted. NOTE: If the start and stop times are noted on the COC, but the Total Volume is left blank, then the flow rate of the pump must be noted in Special Instructions so that the Total Volume can be calculated.

9) Sample the remaining sites, following steps 3 - 8 for each cassette.

10) Make sure the package used for shipping is well cushioned to avoid breakage.

* Allegro Industries states that the M2 “operates at an optimal flow rate” of 15 L/min for 10 minutes, 5 minutes, or 1 minute “depending on the environment (e.g. heavy dust).



References

M2 Multi-Mold Instructions, Allegro Industries (Garden Grove, CA)

M2 Multi-Mold™ is a registered trademark of Allegro Industries. For more information contact Allegro Industries at www.allegrosafety.com.