



## CULTURE MEDIA PLATE PREPERATION Automated Preparation using Masterclave

### 1. Introduction

A microbiological culture, or microbial culture, is a method of multiplying microbial organisms by letting them reproduce in predetermined culture medium under controlled laboratory conditions in a specially prepared nutrient medium.

### 2. Culture Media Plate Preparation

General Component required

- Sterile Petridishes
- Ancillary culture media, reagents, and laboratory equipment
- Masterclave 09 @ media preparator
- APS One @ media dispenser

### 3. Procedure for preparation (Automated)

1. Press the power button on the masterclave 09.
2. Filling of D/W in the external vessel of machine.
3. Insert the inner vessel and block it with the maintaining clips. Make sure the stirring blade is placed on its axis.
4. Place the ingredient required for culture media in the inner vessel (as per instruction on media bottle)
5. Ensure the lid's removable seal is placed properly and close the lid.
6. Enter the number of program and select the program.
7. Start the program.
8. If an addition is required a reminding message is displayed on screen.
9. Press Yes to confirm the end of the cycle and the beginning of dispensing.
10. Putting the disposal plate on the column of APS One machine.
11. From the main menu, select the carousel loading menu.
12. Then validate it.
13. Use the A and B keys to choose a ration of columns.
14. Install the dispensing tubing.



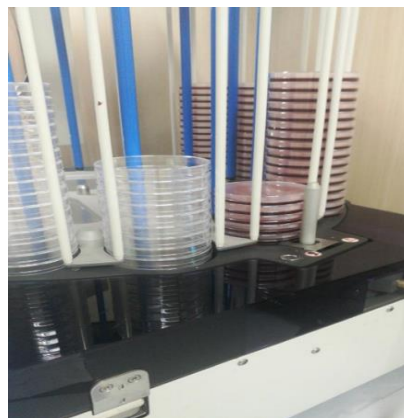
Figure 1 : Masterclave 09 media preparator



Figure 2 : Selecting program from APS One



15. Install the tubing on the pump and close the pump cover.
16. From the main menu, select the dispensing cycle menu and validate.
17. Select the program and validate.
18. Press A key for dispensing.
19. After dispensing, remove dispensing tube from machine, cleaning the lid, inner vessel, drain out the water from the masterclave 09 and turn off both machines.



**Figure 3** : Dispensing media culture plate on APS One

#### **4. Storage of Agar Plate**

- It is advisable to use freshly poured plated media on the day of preparation.
- Alternatively, plates should be placed in the refrigerator as soon as they have solidified.
- Representative plates incubated at  $35 \pm 2^\circ\text{C}$  as a sterility check.
- If storage of plates is for more than several days, it is recommended that they be wrapped in plastic or otherwise protected to prevent moisture loss.
- Most media, and especially those containing dyes or indicators, should be protected from light during storage.
- Shelf life: agar plate can be used until the expired date mention on the media bottle and there is no change in the appearance of the medium to suggest contamination or deterioration.

#### **References**

- <https://www.biomerieux-usa.com/industry/masterclave-media-preparators>
- <https://www.biomerieux-diagnostics.com/aps-one-media-dispenser>
- University of Medical Technology : Microbiology General Practical Guidance Handbook