

### **AGAR PLATES - HINTS & TIPS**

### **INTRODUCTION**

This document gives some hints and tips on preparing, using and storing plates.

### **ADVICE**

# 1. Plates dry out unevenly and quickly.

If the agar dries unevenly and quickly, then it is probably due to the timing when the agar is poured. After autoclaving, if you let the agar cool down too much, then the agar will solidify quickly and unevenly. I would recommend pouring soon after the agar drops to around 50-55 degree C. The rule of thumb is that if I can handle the heat of the flask when wearing gloves, then the agar is ready to be poured. This is because the temperature of the agar will drop quickly to room temperature when it is below 50 C. If you don't need to add additional drugs or chemicals to the media, then you can pour the agar at an even higher temperature. The key is to try to pour the agar earlier than you usually do, so that there is more time for agar to solidify evenly.

# 2. Plates show cracks soon after drying and storage.

If you feel that the plates show cracks soon after you dry and store them, then it is probably due to the way you store the plates.

After pouring the plates, I would recommend letting the plates dry with lids on overnight at room temperature. Bag the plates the next morning and store at an appropriate temperature. If there is no drug in the media, then store the plates at room temperature. However, if there are drugs in the media and the drugs are unstable at room temperature, then of course store them at 4 degree C. I would also recommend using fresher plates. Usually, the plates are ready to be used the next day after pouring. If you have over drying and unevenness problem, try using plates that are no more than 1 week old and see if that improves the result.

## 3. Want to avoid condensation on the plates.

To reduce / avoid condensation store the plates upside down (the agar surface faces down). This applies to all plates regardless of media types.

If you use fresher plates and worry that the plates might still be too wet, you could open the lids and let the plates expose to open air for 5 - 10 min. You should also have a flame burning as flames keep the plate sterile while they are exposed to the open air.

# CONCLUSION

We hope that this explanation will assist you in performing the above procedure. If you need further assistance do not hesitate to contact us at Singer Instruments.

## **CONTACT INFORMATION**

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