

## Agar Preparation Page

### **Agar preparation**

- 1.) Add 1 liter of water to a 1 liter flask or 1L beaker.
- 2.) Place on a stirring hotplate. Place the hotplate on high
- 3.) Add a stirring magnet to the 1 liter of water. Place the magnet setting on #4.
- 4.) Slowly add 23 grams of agar powder to the flask be careful not to get it on the sides (a full batch 1000ml or 1 l will fill @50 petri dishes).
- 5.) Allow the solution to turn from a cloudy liquid to clear like apple juice (the temperature will be nearly 100 Celcius).
- 6.) Remove from the heat and allow to cool so you can pour it.
- 7.) Adjust your amounts to fit your needs. (ie. 11.5 grams agar in 500ml of water for a half batch about 25 plates)

### **Without treatment added to agar**

- 1.) Follow the preparation directions on the agar container. Do not make a full batch of agar unless you are going to use it all (a full batch 1000ml or 1 l will fill @50 petri dishes).
- 2.) Check with others in your class when making agar.

#### Agar pouring

- 1.0 When pouring the agar into your petri dishes do not open the cover or expose the inside of the petri dish to the air.
- 2.0 Always open the close the lid without placing the lid on the desk top.
- 3.0 Clam the lid open just enough to pour the agar.
- 4.0 Pour just enough to cover the bottom of the dish with a thin layer of agar (1-3mm thick).
- 5.0 Allow to cool without moving the petri dishes (leave at their location on the desk). Agar that gets on the lid of the petri dish will ruin the pour and must be repeated.
- 6.0 When cool you may add bacteria. After adding invert the plates and place them in the correct incubator for your specific amount of time.

### **With Treatment in the Agar**

- 1.) Follow the preparation directions on the agar container. Do not make a full batch of agar unless you are going to use it all (a full batch 1000ml or 1 L will fill @50 petri dishes).
- 2.) Check with other groups in your class when making agar to determine your needs.

#### Agar pouring

- 1.) When pouring the agar into your petri dishes do not open the cover or expose the inside of the petri dish to the air.
- 2.) Allow the vessel containing the agar (without any additive) to cool to the touch then add your treatment. Be sure that you add the correct amount of treatment. Do not add more than you need to the agar because it is only useful to you. Stir gently by swirling the vessel.
- 3.) Always open the close the lid without placing the lid on the desk top.
- 4.) Pour just enough agar to cover the bottom of the dish with a thin layer of agar (1-3 mm).
- 5.) Allow to cool without moving the petri dishes. Agar that gets on the cover will ruin the pour and must be repeated.
- 6.) When cool you may add bacteria. After adding the bacteria invert the plates and place in the incubator for your specific amount of time.