Nutrient Broth, Agar Plates and Slants

Nutrient Broth

- 1. Weigh out 8.0 grams of nutrient broth powder.
- 2. Add to 1.0 liter of distilled or deionized water in a 2.0 liter flask.
- 3. Dissolve the powder completely in the water.
- 4. Dispense into tubes or flasks using a graduated cylinder or a pipette.
- 5. Sterilize at 121° C for 20-25 minutes.

Nutrient Agar Plates:

- 1. Weigh out 23.0 grams of nutrient agar powder.
- 2. Add to 1.0 liter of distilled or deionized water in a 2.0 liter flask.
- 3. Sterilize at 121° C for 20-25 minutes.
- 4. Cool to 50° C.
- 5. Swirl thoroughly to mix agar and nutrients.
- 6. Pour 25-35 ml per petri plate.
- 7. Yields about 35 plates.

Nutrient Agar Slants:

- 1. Place screw cap test tubes in a test tube rack (without the caps).
- Prepare a nutrient agar medium and boil it with stirring until all the agar is melted. You must stir this very well so that the melted agar is distributed throughout the medium.
- 3. Use a pipette to transfer about 5 ml of molten agar to each test tube.
- 4. When all the tubes contain hot agar, place the caps loosely on the tubes.
- 5. Sterilize the tubes at 121° C for 15 minutes with caps loosely on.
- 6. While the medium is till hot, tilt the rack onto a thick book or other solid surface so that the medium in the tubes is slanted. Allow the medium to harden in this position.
- 7. When the medium is cool, tighten the caps.
- 8. These tubes can be stored at room temperature or in the refrigerator.

Related articles:

<u>Tips for Pouring and Storing Agar Plates</u> <u>Sterilizing Laboratory Materials for the Classroom</u>

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