

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).
2. 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 still 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.

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