

Prepared Bacteriological Media

Agar and Broth

Primary Hazard Considerations

- Some media contains antibiotics. Be aware of this if you have a sensitivity to antibiotics; even agar can cause a reaction. It is recommended that you wear latex or nitrile gloves when working with bacteriological media. Always wash your hands with soap and hot water before and after working with bacteriological media.
- Always disinfect your work areas and practice sterile techniques when handling any bacteriological medium.
- **Attention!** A bottle with melted agar containing media is **HOT!** Burns can occur. Always handle hot agar bottle with heat-protective gloves.



Availability

- Bacteriological media is available for purchase year-round.

How Will Media Arrive and Immediate Requirements

- Agar plates will arrive in 90 mm X 15 mm dishes at a volume of 20 mL of agar per plate in packages of 10.
- Agar tubes will arrive in 16 mm X 125 mm tubes at a volume of 6 mL of agar per tube (exceptions: Soft Agar and SIM have 3 mL per tube; Lowenstein-Jensen Agar has 15 mL per tube; Nutrient Agar Deeps have 20 mL per tube).
- Agar bottles will arrive in 250 mL bottles at a volume of 125 mL of agar per bottle (exceptions: Luria Agar has 200 mL in a 250 mL bottle; Phenolphthalein Agar has 800 mL in a 1 L bottle).
- Broth tubes will arrive in 16 mm X 125 mm tubes at a volume of 9 mL of broth per tube.
- Broth bottles will arrive in 250 mL bottles at a volume of 125 mL of broth per bottle (exceptions: NYSM has 500 mL in a 500 mL bottle; Luria Broth has 200 mL in a 250 mL bottle).

Care

- Bottled broth and agar can be stored at room temperature, unless otherwise specified, for about six months. Do not freeze media. Never put bottles or tubes with agar in the freezer. It will cause the agar to breakdown and become unusable.
- Most tube media (both broth and agar) can be stored at room temperature for about two months. The exceptions are Blood Agar, Chocolate Agar, Kligler Iron Agar, Lowenstein-Jensen Agar, Litmus Milk Broth, SIM, and Thioglycollate Broth, all of which should be refrigerated and used within one month after receiving.
- Peptone Succinate Broth should not be refrigerated.
- All agar on plates (Petri dishes) should be stored refrigerated and should be used within one month after receiving.
- To prevent contamination, keep all bottles, tubes, and Petri dishes sealed until ready to use.
- For instructions on how to melt agar and pour plates go to the "Pouring Plates from Prepared Bottled Media" literature.

Disposition

- Consult your school's recommended procedures for disposal.
- Gloves should always be worn when working with contaminated plates.
- Unused broth can be poured down the sink.
- Unused agar plates, bottles, and tubes can be disposed of in the regular trash.
- Contaminated media or inoculated media (tubes, bottles, or plates) can safely be disposed of by one of the following methods:
 - Autoclave @ 121 °C for 15 minutes in an autoclavable bag (Petri dishes will melt in the autoclave— do not autoclave unbagged).
 - Use a 20% bleach solution to kill bacteria in the plate tube or bottle, and then dispose in the regular trash.
 - Use 70% isopropyl alcohol to kill bacteria, and then dispose in the regular trash.