

# Nutrient Agar Preparation



## Introduction

Use the following instructions to prepare nutrient agar.

## Safety Precautions

*Exercise caution when working with the autoclave or pressure cooker as it is very hot. Wear goggles, gloves and a chemical resistant apron. Wash hands thoroughly with soap and water before leaving the laboratory. Follow all laboratory safety guidelines. Please review current Material Safety Data Sheets for additional safety, handling and disposal information.*

## Materials

|                               |                            |
|-------------------------------|----------------------------|
| Nutrient agar, 23 g           | Culture dishes, sterilized |
| Water, distilled or deionized | Graduated cylinder         |
| Autoclave or pressure cooker  | Stirring rod               |
| Balance, 1 g precision        | Weighing dish              |
| Beaker, 2 L                   |                            |

## Procedure

1. Using a weighing dish and balance mass 23 g of nutrient agar.
2. Transfer the nutrient agar solid to a 2-L beaker.
3. Using a 1000-mL graduated cylinder, measure 1000 mL of distilled water. Transfer the water to the beaker of nutrient agar.
4. Stir the solution until the solid is evenly distributed.
5. Place the solution in an autoclave for 15 minutes at 121 °C (15 lbs of pressure). *Note:* Nutrient agar must be sterilized if it will be used as culture media.
6. Allow the solution to cool to 50–55 °C and pour into sterilized culture dishes.

## Disposal

Please consult your current *Flinn Scientific Catalog/Reference Manual* for general guidelines and specific procedures governing the disposal of laboratory wastes. All microorganisms purchased from Flinn Scientific are non-pathogenic. However, to be safe all bacterial cultures should be considered pathogenic and destroyed according to Flinn Biological Waste Disposal Type I before disposal in the trash. The best way to dispose of bacteria on agar plates is to autoclave them in a heat-stable biohazard bag. If an autoclave is not available an alternative is to bleach the plates. Saturate the agar plates with a freshly prepared 10% household bleach solution. Allow plates to sit for 24 hours before disposing.

**Additional materials needed for *Nutrient Agar Preparation* are available from Flinn Scientific, Inc.**

| Catalog No. | Description                           |
|-------------|---------------------------------------|
| GP9090      | Cylinder, Borosilicate Glass, 1000-mL |
| N0092       | Nutrient Agar, 23 g                   |

Consult your *Flinn Scientific Catalog/Reference Manual* for current prices.