



Phytopathology & Microbiology Media/Selection Guide

PhytoTechnology Laboratories' phytopathology media are typically used in microbiology and molecular biology applications for the cultivation, identification, isolation and/or transformation of various plant pathogens. General applications and used of PhytoTechnology Laboratories' phytopathology products are listed in the Phytopathology Media chart. These phytopathology media contain essential nutrients to support the growth of many microorganisms.

General preparation guidelines are as followed:

1. Suspend an appropriate amount of powder in 1 liter or distilled water/ deionized water. Typical working concentration for various media is listed in the PhytoPathology Media Chart. Dissolve the powder medium by stirring.
 - a. If the product contains gelling agent, dissolve the agar by heating to a boil while stirring. Avoid over heating the solution as it might result in a softer agar gel and increased darkening of the medium.
 - b. If the product does not contain gelling agent, but gelling agent is desired add an appropriate amount of gelling ant and adjust the pH as desired.
2. Sterilize the medium in a validated autoclave at 1 kg/cm² (15 psi) 121 °C. The medium should attain a temperature of 121 °C for at least 15 minutes. Refer to the section on the sterilization of Media.
3. Dispense the medium as desired (before or after autoclaving).

Storage of Phytopathology Media

All medium preparations should be stored at 2-6 °C. Store dry medium at room temperature (below 30 °C) or refrigerated (2-6 °C) as indicated on the product label. The dehydrated powder should be free flowing. Deterioration of the powdered medium may be recognized by: 1) granulation, clumping, or particulate matter throughout the powder; 2) pH change; or 3) inability to promote microbial growth when properly used, i.e., with control cultures in a validated protocol. Consult the certificate of analysis (available on the *PhytoTechnology Labs'* web site) for details concerning the appearance of the powder, pH, and solubility.

PhytoTechnology Laboratories®

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Web Site: www.phytotechlab.com

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PhytoTechnology Laboratories® Technical Information

PHYTOPATHOLOGY & MICROBIOLOGY MEDIA SELECTION GUIDE

Product No.	Product Name	Typical Working Concentration (g/L)	General Application
B129	Bacteria Screening medium 523	32.15	Used in a screening protocol published by Thomas (2004)
C442	Corn Meal Agar	22	General purpose medium for culturing various fungi
C443	Czapek-Dox Broth	35.01	Used for the cultivation of fungi and soil-borne bacteria
C506	Czapek-Dox Agar	50.01	
L476	Leifert & Waites Sterility Test Medium	45.22	Used for the determination and identification of potential pathogens
M484	Malt Extract Broth	20	Used for the isolation and detection of yeast and molds
M498	Malt Extract Agar	48	
N611	Nutrient Broth	8	General purpose media for less fastidious organisms
N601	Nutrient Agar	23	
O606	Oatmeal Agar	10.5	Used for the cultivation of fungi, particularly for macrospore formation
P762	Potato Dextrose Broth	24	General purpose media for culturing bacteria, fungi and yeast
P772	Potato Dextrose Agar	39	
W887	Wilkins-Chalgren Agar	43	Used for the cultivation of anaerobes
Y893	YMB Medium	26.2	Used for the cultivation of <i>Rhizobium</i> and fungi
Y889	Yep Medium	40	Used for the cultivation of <i>Agrobacterium</i> and yeasts
Y8565	YEP Broth	25	
Y8480	Yep Medium (ADP FREE)	45	
L5128	LB Agar, Lennox L Modification	32	Used for the cultivation of <i>Escherichia coli</i> for molecular biology applications
L465	LB Agar, Miller Modification	37	
L301	LB Broth Solution, Miller Modification	1x	
L475	LB Broth, Miller Modification	25	
L5207	LB Broth w/IPTG, Miller Modification	25.23	
M5506	Malt Extract Agar	30	Used for the isolation and transformation of yeasts and fungi.
M580	Melin-Norkrans Medium, Modified	20.81	Used for the isolation of fungi
S7536	Sabouraud Dextrose Broth	50	Used for the isolation and cultivation of yeasts, fungi, and bacteria
S657	SOC Medium Solution	1x	Used for the recovery step of <i>Escherichia coli</i> competent cell transformations
S7476	Sordaria Crossing Agar	35.1	Used for the genetic crossover culture of <i>Sordaria fimicola</i> .
T760	Terrific Broth	47	Used for the cultivation of <i>Escherichia coli</i> for molecular biology applications
T754	Terrific Broth Solution	1x	
T7900	Tryptic Soy Broth, Type 1	25	General purpose media for fastidious organisms
T8000	Tryptic Soy Broth, Type 2	30	

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