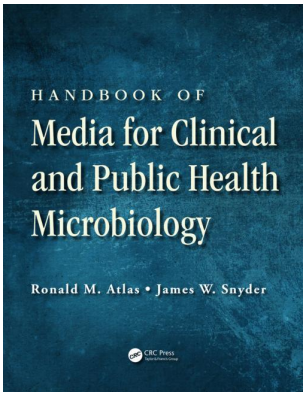

Handbook of Media for Clinical and Public Health Microbiology

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Mycological Media

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ABY Agar
(Acid Bismuth Yeast Agar)

Composition per liter:

Agar	20.0g
Glucose	20.0g
$Bi_2(SO_3)_2$	8.0g
$(NH_4)_2SO_4$	3.0g
KH_2PO_4	3.0g
$MgSO_4 \cdot 7H_2O$	0.25g
$CaCl_2 \cdot 2H_2O$	0.25g
Biotin	10.0µg

pH 7.2 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Cool tubes in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and differentiation of *Candida albicans* from other *Candida* species. *Candida albicans* and *Candida tropicalis* colonies appear as smooth, brownish-black round colonies. Other *Candida* species are differentially pigmented or produce diffusible pigments. Usually used in conjunction with BiGGY agar to differentiate further *Candida*; on BiGGY agar, *Candida albicans* appears as brown to black colonies with no pigment diffusion and no sheen, whereas *Candida tropicalis* appears as dark brown colonies with black centers, black pigment diffusion, and a sheen.

Acetate Ascospore Agar
(Ascospore Agar)

Composition per liter:

Agar	30.0g
Potassium acetate	10.0g
Yeast extract	2.5g
Glucose	1.0g

pH 6.4 ± 0.2 at 25°C

Source: This medium is available from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the enrichment of ascosporogenous yeasts and their production of ascospores.

Antibiotic Assay Medium No. 4
(Yeast Beef Agar)

Composition per liter:

Agar	15.0g
Peptone	6.0g
Yeast extract	3.0g
Beef extract	1.5g
Glucose	1.0g

pH 6.6 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For antibiotic assay testing.

Antibiotic Assay Medium No. 12
(Nystatin Assay Agar)

Composition per liter:

Agar	25.0g
Peptone	10.0g
Glucose	10.0g
NaCl	10.0g
Yeast extract	5.0g
Beef extract	2.5g

pH 6.0 ± 0.1 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For antibiotic assay effectiveness testing. For the assay of antifungal agents such as amphotericin and nystatin.

Antibiotic Assay Medium No. 13

Composition per liter:

Glucose	20.0g
Peptone	10.0g

pH 5.6 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation.

Media should not be used if there are any signs of deterioration (discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For testing the effectivness of antibiotics on yeast and molds.

Antibiotic Assay Medium No. 19

Agar 23.5g
Glucose 10.0g
NaCl 10.0g
Peptone 9.4g
Yeast extract 4.7g
Beef extract 2.4g

pH 6.1 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Hi-Media.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For assaying the mycostatic activity of pharmaceutical preparations. For seed agar for the plate assay to test the effectiveness of nystatin, amphotericin B, and natamycin.

Antibiotic Assay Medium F

Composition per liter:

Agar 23.5g
Glucose 10.0g
NaCl 10.0g
Peptone 9.4g
Yeast extract 4.7g
Beef extract 2.4g

pH 6.0 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the microbiological assay of nystatin using *Saccharomyces cerevisiae* or *Candida tropicalis*.

Antibiotic HiVeg Assay Medium No. 1 (Antibiotic HiVeg Assay Medium - A) (Seed HiVeg Agar)

Composition per liter:

Agar 15.0g
Plant peptone 6.0g
Plant hydrolysate 4.0g
Yeast extract 3.0g
Plant extract 1.5g
Glucose 1.0g

pH 6.6 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Hi-Media.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For antibiotic assay testing. Widely employed as seed agar in the preparation of plates for microbiological agar diffusion antibiotic assays.

Antibiotic HiVeg Assay Medium No. 12 (Nystatin HiVeg Assay Agar)

Composition per liter:

Agar 25.0g
Plant peptone 10.0g
Glucose 10.0g
NaCl 10.0g
Yeast extract 5.0g
Plant extract 2.5g

pH 6.0 ± 0.1 at 25°C

Source: This medium is available as a premixed powder from Hi-Media.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For antibiotic assay effectiveness testing. For the assay of antifungal antibiotics like amphotericin and nystatin.

Antibiotic HiVeg Assay Medium No. 13

Composition per liter:

Glucose 20.0g
Plant peptone 10.0g

pH 5.6 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Hi-Media.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For testing the effectivness of antibiotics on yeast and molds.

Antibiotic HiVeg Assay Medium No. 19 (Antibiotic HiVeg Assay Medium G)

Agar	23.5g
Glucose	10.0g
NaCl	10.0g
Plant peptone	9.4g
Yeast extract	4.7g
Plant extract	2.4g

pH 6.1 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Hi-Media.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For assaying the mycostatic activity of pharmaceutical preparations. For seed agar for the plate assay to test the effectiveness of nystatin, amphotericin B, and natamycin.

Antibiotic Medium 13 (Sabouraud Liquid Broth, Modified) (Fluid Sabouraud Medium)

Composition per liter:

Glucose	20.0g
Pancreatic digest of casein	5.0g
Peptic digest of animal tissue	5.0g

pH 5.7 ± 0.1 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For testing the effectivness of antibiotics on yeast and molds.

Antibiotic Medium 19 (Nystatin Assay Agar)

Composition per liter:

Agar	23.5g
Glucose	10.0g
NaCl	10.0g
Pancreatic digest of gelatin	9.4g
Yeast extract	4.7g
Beef extract	2.4g

pH 6.1 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For assaying the mycostatic activity of pharmaceutical preparations. For seed agar for the plate assay to test the effectiveness of nystatin, amphotericin B, and natamycin.

Antibiotic Medium 20

Composition per liter:

Glucose	11.0g
Pancreatic digest of casein	10.0g
Yeast extract	6.5g
Pancreatic digest of gelatin	5.0g
K_2HPO_4	3.68g
NaCl	3.5g
Beef extract	1.5g
KH_2PO_4	1.32g

pH 6.6 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For assaying the mycostatic activity of pharmaceutical preparations.

Antifungal Assay Agar

Composition per liter:

Glucose	50.0g
Agar	15.0g
Sodium citrate	4.5g
Pancreatic digest of casein	4.0g
Citric acid	1.0g
K_2HPO_4	0.55g

KCl	0.425g
$CaCl_2 \cdot 2H_2O$	0.125g
$MgSO_4 \cdot 7H_2O$	0.125g
Inositol	0.025g
$MnSO_4 \cdot 4H_2O$	2.5mg
Niacin	2.5mg
Caclium pantothenate	2.5mg
$FeCl_3$	2.5mg
Pyridoxine hydrochloride	0.25mg
Thiamine	0.25mg
Biotin	0.008mg

pH 5.5 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Sigma Aldrich.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For assaying antifungal activity of pharmaceutical products and other materials by cylinder plate or disc method.

Antifungal Assay HiVeg Agar

Composition per liter:

Glucose	50.0g
Agar	15.0g
Sodium citrate	4.5g
Plant hydrolysate	4.0g
Citric acid	1.0g
K_2HPO_4	0.55g
KCl	0.425g
$CaCl_2 \cdot 2H_2O$	0.125g
$MgSO_4 \cdot 7H_2O$	0.125g
Inositol	0.025g
$MnSO_4 \cdot 4H_2O$	2.5mg
Niacin	2.5mg
Calcium pantothenate	2.5mg
$FeCl_3$	2.5mg
Pyridoxine hydrochloride	0.25mg
Thiamine	0.25mg
Biotin	0.008mg

pH 5.5 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Hi-Media.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For assaying antifungal activity of pharmaceutical products and other materials by cylinder plate or disc method.

Antimycotic Sensitivity Test Agar

Composition per liter:

Agar	25.0g
Glucose	20.0g
Pancreatic digest of casein	19.0g
Sodium citrate	10.0g
Yeast extract	10.0g
Na_2HPO_4	1.0g

pH 6.0 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Hi-Media.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For testing antimycotic sensitivity by the diffusion method.

Aspergillus Differentiation Medium Base with Chloramphenicol

Composition per liter:

Yeast extract	20.0g
Agar	15.0g
Peptic digest of animal tissue	10.0g
Ferric ammonium citrate	0.5g
Chloramphenicol	0.1g
Dichloran	2.0mg

pH 6.3 ± 0.2 at 25°C

Source: This medium is available from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Pour into Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the detction of aflatoxin producing *Aspergillus* spp. from foods.

BiGGY Agar (Bismuth Sulfite Glucose Glycerin Yeast Extract Agar) (Nickerson Medium)

Composition per liter:

Agar	16.0g
Glucose	10.0g

Glycine 10.0g
Bismuth ammonium citrate 5.0g
Na_2SO_3 ..... 3.0g
Yeast extract 1.0g

pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Oxoid Unipath and BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly and heat with frequent agitation until boiling. Distribute into tubes or flasks. Do not autoclave. Cool to approximately 45°–50°C. If desired, add 2mg/L of neomycin sulfate. Swirl to disperse the insoluble material and pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the detection, isolation, and presumptive identification of *Candida* species. Addition of neomycin helps inhibit bacterial species. *Candida albicans* appears as brown to black colonies with no pigment diffusion and no sheen. *Candida tropicalis* appears as dark brown colonies with black centers, black pigment diffusion, and a sheen. *Candida krusei* appears as shiny, wrinkled, brown to black colonies with yellow pigment diffusion. *Candida pseudotropicalis* appears as flat, shiny red to brown colonies with no pigment diffusion. *Candida parakrusei* appears as flat, shiny, wrinkled, dark reddish-brown colonies with light reddish-brown peripheries and a yellow fringe. *Candida stellatoidea* appears as flat dark brown colonies with a light fringe.

Bird Seed Agar (*Guizotia abyssinica* Creatinine Agar) (Niger Seed Agar)/(Staib Agar)

Composition per liter:

Agar 15.0g
Glucose 15.0g
Creatinine 5.0g
KH_2PO_4 ..... 3.0g
Biphenyl 1.0g
Chloramphenicol 0.5g
Guizotia abyssinica seed (niger seed) extract 1000.0mL

pH 6.7 ± 0.2 at 25°C

Preparation of Medium: Prepare seed extract by grinding 50.0g of *Guizotia abyssinica* seed in 1.0L of distilled/deionized water. Boil for 30 min. Filter through cheesecloth and filter paper. Add remaining components to seed filtrate. Mix thoroughly and heat with frequent agitation until boiling. Distribute into flasks or tubes. Autoclave for 25 min at 15 psi pressure–110°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and differentiation of *Cryptococcus neoformans* from other *Cryptococcus* species and other yeasts.

Blood Glucose Cystine Agar

Composition per 100.0mL:

Nutrient agar 85.0mL
Glucose cystine solution 10.0mL
Human blood, fresh 5.0mL

pH 6.8 ± 0.2 at 25°C

Nutrient Agar:
Composition per liter:

Agar 15.0g
Pancreatic digest of gelatin 5.0g
Beef extract 3.0g

Source: Nutrient agar is available as a premixed powder from BD Diagnostic Systems.

Preparation of Nutrient Agar: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat while stirring and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C.

Glucose Cystine Solution:
Composition per 50.0mL:

Glucose 12.5g
L-Cystine·HCl 0.5g

Preparation of Glucose Cystine Solution: Add components to distilled/deionized water and bring volume to 50.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: To 85.0mL of cooled, sterile agar solution, aseptically add 10.0mL of sterile glucose cystine solution and 5.0mL of human blood. Mix thoroughly. Pour into sterile Petri dishes or distribute into sterile tubes.

Use: For the cultivation of various fungi.

Bonner-Addicott Medium

Composition per liter:

Agar 25.0g
Glucose 20.0g
$Ca(NO_3)_2 \cdot 4H_2O$ 0.236g
KNO_3 ..... 0.081g
KCl 0.065g
$MgSO_4 \cdot 7H_2O$ 0.036g
KH_2PO_4 ..... 0.012g
Ferric tartrate 1.0mg

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of a variety of fungi.

Brain Heart CC Agar (Brain Heart Cycloheximide Chloramphenicol Agar)

Composition per liter:

Pancreatic digest of casein 16.0g
Agar 13.5g

Brain heart, solids from infusion 8.0g
Peptic digest of animal tissue 5.0g
NaCl 5.0g
Na_2HPO_4 ..... 2.5g
Glucose 2.0g
Cycloheximide 0.5g
Chloramphenicol 0.05g

pH 7.4 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Distribute into tubes or flasks while shaking to distribute precipitate. Autoclave for 15 min at 15 psi pressure–118°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation of fastidious pathogenic fungi such as *Histoplasma capsulatum* and *Blastomyces dermatiditis* from specimens heavily contaminated with bacteria and other fungi. It may also be used as a base supplemented with sheep blood and gentamicin for enrichment and additional selectivity.

Brain Heart CC Agar, HiVeg (Brain Heart Cycloheximide Chloramphenicol Agar, HiVeg)

Composition per liter:
Agar 15.0g
Plant infusion 10.0g
Plant peptone No. 3 ..... 10.0g
Plant special infusion 7.5g
NaCl 5.0g
Na_2HPO_4 ..... 2.5g
Glucose 2.0g
Cycloheximide 0.5g
Chloramphenicol 0.05g

pH 7.4 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Distribute into tubes or flasks while shaking to distribute precipitate. Autoclave for 15 min at 15 psi pressure–118°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation of fastidious pathogenic fungi such as *Histoplasma capsulatum* and *Blastomyces dermatiditis* from specimens heavily contaminated with bacteria and other fungi. This medium may also be used as a base supplemented with sheep blood and gentamicin for enrichment and additional selectivity.

Brain Heart Infusion Agar

Composition per liter:
Pancreatic digest of casein 16.0g
Agar 13.5g
Brain heart, solids from infusion 8.0g
Peptic digest of animal tissue 5.0g
NaCl 5.0g
Glucose 2.0g
Na_2HPO_4 ..... 2.5g

pH 7.4 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Oxoid Unipath and BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Distribute into tubes or flasks while shaking to distribute precipitate. Autoclave for 15 min at 15 psi pressure–121°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of a wide variety of fastidious microorganisms, including bacteria, yeasts, and molds. With the addition of 10% sheep blood, it is used for the isolation and cultivation of many fungal species, including systemic fungi, from clinical speciments and nonclinical specimens of public health importance. The addition of gentamicin and chloramphenicol with 10% sheep blood produces a selective medium used for the isolation of pathogenic fungi from specimens heavily contaminated with bacteria and saprophytic fungi. It is recommended for the isolation of *Histoplasma capsulatum* and other pathogenic fungi, including *Coccidioides immitis*.

Brain Heart Infusion Agar (BAM M24 Medium 2)

Composition per liter:
Agar 15.0g
Pancreatic digest of gelatin 14.5g
Brain heart, solids from infusion 6.0g
Peptic digest of animal tissue 6.0g
NaCl 5.0g
Glucose 3.0g
Na_2HPO_4 ..... 2.5g

pH 7.4 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Distribute into tubes or flasks while shaking to distribute precipitate. Autoclave for 15 min at 15 psi pressure–121°C. Mix thoroughly. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refriger-

ation (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of a wide variety of fastidious microorganisms, including yeasts and molds.

Brain Heart Infusion Agar with 1% Agar, HiVeg

Composition per liter:

Agar	15.0g
Plant infusion	10.0g
Plant peptone No. 3	10.0g
Plant special infusion	7.5g
NaCl	5.0g
Na_2HPO_4	2.5g
Glucose	2.0g

pH 7.4 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of a variety of fastidious pathogenic yeasts and molds.

Brain Heart Infusion Agar with 1% Agar, HiVeg

Composition per liter:

Agar	10.0g
Plant infusion	10.0g
Plant peptone No. 3	10.0g
Plant special infusion	7.5g
NaCl	5.0g
Na_2HPO_4	2.5g
Glucose	2.0g

pH 7.4 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of a variety of fastidious pathogenic yeasts and molds.

Brain Heart Infusion Agar with 1% Agar, HiVeg with Penicillin

Composition per liter:

Agar	15.0g
Plant infusion	10.0g
Plant peptone No. 3	10.0g
Plant special infusion	7.5g
NaCl	5.0g
Na_2HPO_4	2.5g
Glucose	2.0g
Penicillin solution	2.0mL

pH 7.4 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Penicillin Solution:

Composition per 2.0mL:

Penicillin	0.1g

Preparation of Penicillin Solution: Add penicillin to ethanol and bring volume to 2.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45–50°C. Aseptically add 2.0mL penicillin solution. Mix thoroughly. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of a variety of fastidious pathogenic yeasts and molds.

Brain Heart Infusion Agar with Chloramphenicol

Composition per liter:

Pancreatic digest of casein	16.0g
Agar	13.5g
Brain heart, solids from infusion	8.0g
Peptic digest of animal tissue	5.0g
NaCl	5.0g
Glucose	2.0g
Na_2HPO_4	2.5g
Sheep blood, defibrinated	50.0mL
Chloramphenicol solution	10.0mL

pH 7.4 ± 0.2 at 25°C

Chloramphenicol Solution:

Composition per 10.0mL:

Chloramphenicol	0.05g

Preparation of Chloramphenicol Solution: Add chloramphenicol to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except chloramphenicol solution and sheep blood, to distilled/deionized water and bring volume to 940.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add sterile chloramphenicol solution and sheep blood. Mix thoroughly. Pour into sterile Petri dishes or distribute into sterile tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation and cultivation of a wide variety of fungal species, especially systemic fungi, from clinical speciments and nonclinical specimens of public health importance. For the selective isolation of pathogenic fungi from specimens heavily contaminated with bacteria and saprophytic fungi. For the maintenance of fungal species on slant cultures.

Brain Heart Infusion Agar with Penicillin and Streptomycin

Composition per liter:

Pancreatic digest of casein	16.0g
Agar	13.5g
Brain heart, solids from infusion	8.0g
Peptic digest of animal tissue	5.0g
NaCl	5.0g
Glucose	2.0g
Na_2HPO_4	2.5g
Streptomycin	40.0mg
Penicillin	20,000U
Sheep blood, defibrinated	50.0mL

pH 7.4 ± 0.2 at 25°C

Preparation of Medium: Add components, except sheep blood, to distilled/deionized water and bring volume to 950.0mL. Mix thoroughly and while stirring bring to a boil for 1 min to completely dissolve. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 50°C. Aseptically add 50.0mL of defibrinated sheep blood. Mix thoroughly. Pour into sterile Petri dishes while agitating gently to distribute the precipitate through the medium.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation and cultivation of a wide variety of fungal species, especially systemic fungi, from clinical speciments and nonclinical specimens of public health importance. For the selective isolation of pathogenic fungi from specimens heavily contaminated with bacteria and saprophytic fungi. For the maintenance of fungal species on slant cultures.

Brain Heart Infusion Agar with 10% Sheep Blood, Gentamicin, and Chloramphenicol

Composition per liter:

Pancreatic digest of casein	16.0g
Agar	13.5g
Brain heart, solids from infusion	8.0g
Peptic digest of animal tissue	5.0g
NaCl	5.0g
Glucose	2.0g
Na_2HPO_4	2.5g
Sheep blood, defibrinated	100.0mL
Antibiotic solution	10.0mL

pH 7.4 ± 0.2 at 25°C

Antibiotic Solution:

Composition per 10.0mL:

Chloramphenicol	0.05g
Gentamicin	0.05g

Preparation of Antibiotic Solution: Add components to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except antibiotic solution and sheep blood, to distilled/deionized water and bring volume to 890.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add sterile antibiotic solution and sheep blood. Mix thoroughly. Pour into sterile Petri dishes or distribute into sterile tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation and cultivation of a wide variety of fungal species, especially systemic fungi, from clinical speciments and nonclinical specimens of public health importance. For the selective isolation of pathogenic fungi from specimens heavily contaminated with bacteria and saprophytic fungi. For the maintenance of fungal species on slant cultures.

Brilliance™ *Candida* Agar

Composition per liter:

Chromogenic mix	13.6g
Agar	13.6g
Peptone	4.0g
Selective supplement solution	10.0mL

pH 6.0 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Oxoid Unipath.

Selective Supplement Solution:

Composition per 10.0mL:

Chloramphenicol	0.5g

Preparation of Selective Supplement Solution: Add chloramphenicol to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except selective supplement solution, to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Add 10.0mL selective supplement solution. Gently heat while stirring and bring to boiling. Do not autoclave. Cool to 45°C. Mix thoroughly. Pour into sterile Petri dishes.

Storage/Shelf Life: Store in the dark under refrigeration (2-8°C). Chromogenic agars are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Do not use after the expiration date supplied by the manufacturer.

Use: For the rapid isolation and identification of clinically important *Candida* species. The green color of *Candida albicans* and *Candida dubliniensis* is caused by the same chromogenic reaction as the dark blue color of *Candida tropicalis*. *Candida glabrata, Candida kefyr, Candida parapsilosis,* and *Candida lusitaniae* appear as a variety of beige/brown/yellow colors, due to the mixture of natural pigmentation and some alkaline phosphatase activity.

Caffeic Acid Ferric Citrate Test Medium (CAFC Test Medium) (Caffeic Acid Agar)

Composition per liter:

Agar	20.0g
$(NH_4)_2SO_4$	5.0g
Glucose	5.0g
Yeast extract	2.0g
K_2HPO_4	0.8g
$MgSO_4 \cdot 3H_2O$	0.7g
Caffeic acid·$1/2H_2O$	0.18g
Chloramphenicol	0.05g
Ferric citrate solution	4.0mL

pH 6.5 ± 0.2 at 25°C

Ferric Citrate Solution:

Composition per 20.0mL:

Ferric citrate	100.0mg

Preparation of Ferric Citrate Solution: Add ferric citrate to 20.0mL of distilled/deionized water. Mix thoroughly.

Preparation of Medium: Add components, except chloramphenicol, to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Heat to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 0.05g of chloramphenicol. Mix thoroughly. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation and presumptive identification of *Cryptococcus neoformans*. *Cryptococcus neoformans* appears as dark brown colonies. All other *Cryptococcus* species appear as light brown or nonpigmented colonies.

Canavine-Glycine Bromthymol Blue Agar

Composition per liter:

Agar	20.0g
Glycine	10.0g
K_2HPO_4	1.0g
$MgSO_4 \cdot 7H_2O$	1.0g
Bromothymol Blue	0.08g
L-Canavanine sulfate	0.03g
Thiamine hydrochloride	1.0mg

pH 5.8 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of *Cryptococcus neoformans* from *Cryptococcus gatti*. Growth and a color change to medium blue indicates *C. gattii*; no growth or minimal growth that is medium yellow or green may be interpreted as *C. neoformans* var. *neoformans*.

Candida Agar

Composition per liter:

Agar	20.0g
Glucose	10.0g
Peptic digest of animal tissue	5.0g
Yeast extract	3.0g
Malt extract	3.0g
Aniline Blue	0.1g

pH 6.2 ± 0.2 at 25°C

Source: This medium is available from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation and differentiation of *Candida albicans*.

Candida BCG Agar Base (*Candida* Bromcresol Green Agar Base)

Composition per liter:

Glucose	40.0g
Agar	15.0g
Peptone	10.0g
Yeast extract	1.0g
Bromcresol Green	0.02g
Neomycin solution	10.0mL

pH 6.1 ± 0.1 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Neomycin Solution:

Composition per 10.0mL:

Neomycin	0.5g

Preparation of Neomycin Solution: Add neomycin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except neomycin solution, to distilled/deionized water and bring volume to 1.0L. Mix thoroughly and heat gently until boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 50°–55°C. Aseptically add 10.0mL of sterile neomycin solution. Mix thoroughly. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and identification of *Candida* species. It is a highly differential medium that is used for demonstrating mor-

phological and biochemical reactions characterizing different *Candida* species. *Candida albicans* appears as blunt conical colonies with smooth edges and yellow to blue-green color. *Candida stellatoidea* appears as convex colonies with smooth edges and yellow to green color. *Candida tropicalis* appears as convex colonies with wavy edges and yellow-green to green color with a dark blue-green base. *Candida pseudotropicalis* appears as convex, shiny colonies with smooth edges and green color with a light green edge. *Candida krusei* appears as low conical colonies with spreading edges and blue-green color. *Candida stellatoidea* appears as convex colonies with smooth edges and yellow to green color.

Candida BCG HiVeg Agar Base with Neomycin

Composition per liter:

Glucose 40.0g
Agar 15.0g
Plant peptone 10.0g
Yeast extract 1.0g
Bromcresol Green 0.02g
Neomycin solution 10.0mL

pH 6.1 ± 0.1 at 25°C

Source: This medium, without neomycin solution, is available as a premixed powder from HiMedia.

Neomycin Solution:

Composition per 10.0mL:

Neomycin 0.5g

Preparation of Neomycin Solution: Add neomycin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except neomycin solution, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly and heat gently until boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 50°C. Aseptically add 10.0mL of sterile neomycin solution. Mix thoroughly. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and identification of *Candida* species. It is a highly differential medium that is used for demonstrating morphological and biochemical reactions characterizing different *Candida* species. *Candida albicans* appears as blunt conical colonies with smooth edges and yellow to blue-green color. *Candida stellatoidea* appears as convex colonies with smooth edges and yellow to green color. *Candida tropicalis* appears as convex colonies with wavy edges and yellow-green to green color with a dark blue-green base. *Candida pseudotropicalis* appears as convex, shiny colonies with smooth edges and green color with a light green edge. *Candida krusei* appears as low conical colonies with spreading edges and blue-green color. *Candida stellatoidea* appears as convex colonies with smooth edges and yellow to green color.

Candida Chromogenic Agar

Composition per liter:

Glucose 20.0g
Peptone 10.0g
Chloramphenicol 0.5g
Chromogenic mix 0.4g

pH 7.0 ± 0.2 at 25°C

Source: This medium is available from CONDA, Barcelona, Spain.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Do not autoclave. Cool to 50°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store in the dark under refrigeration (2-8°C). Chromogenic agars are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Do not use after the expiration date supplied by the manufacturer.

Use: For the rapid isolation and identification of clinically important *Candida* species. *Candida tropicalis* colonies appear dark blue. *Candida albicans* colonies appear green. *Candida krusei* colonies are pink-purple.

Candida Diagnostic Agar (CDA)

Composition per liter:

Glucose 40.0g
Agar 15.0g
Peptone, mycological 10.0g
Ammonium 4-{2-[4-(2-acetamido-2-deoxy-β-D-glucopyranosyloxy)-3-methoxy- phenyl]-vinyl}-1-(propan-3-yl-oate)-quinolium bromide 0.32g

pH 6.9 ± 0.2 at 25°C

Source: This medium is available from PCR Diagnostics.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly and heat with frequent agitation until boiling. Boil until components are fully dissolved. Do not autoclave. Cool to 45°–50°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store in the dark under refrigeration (2-8°C). Chromogenic agars are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Do not use after the expiration date supplied by the manufacturer.

Use: For the rapid isolation and identification of *Candida* species. *Candida albicans* and *Candida dubliniensis* produce white colonies with deep-red spots on a yellow transparent background. Colonies of *Candida tropicalis* and *Candida kefyr* are uniformly pink, and colonies of other *Candida* spp., including *Candida glabrata* and *Candida parapsilosis,* appear white.

Candida Isolation Agar

Composition per liter:

Agar 20.0g
Glucose 10.0g
Peptone 5.0g
Yeast extract 3.0g
Malt extract 3.0g
Aniline Blue 0.1g

pH 5.9 ± 0.5 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation and differentiation of *Candida albicans*. *Candida albicans* turns the medium blue.

CandiSelect 4™

Composition per liter:
Proprietary

Source: Available from BioRad.

Preparation of Medium: Preprepared plates.

Storage/Shelf Life: Prepared media should be stored under refrigeration (2-8°C). Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the direct identification of *Candida albicans* and for the presumptive identification of *Candida tropicalis, Candida glabrata*, and *Candida krusei. C. albicans* form pink to purple colones; other *Candida* species form turquoise colonies.

Carbon Assimilation Medium

Composition per liter:

Agar solution	500.0mL
Mineral base medium	500.0mL

pH 6.5 ± 0.1 at 25°C

Agar Solution:
Composition per liter:

Agar	32.0g

Preparation of Agar Solution: Add agar to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C.

Mineral Base Medium:
Composition per 500.0mL:

Carbohydrate	10.0g
NaCl	5.0g
NH_4HPO_4	1.0g
K_2HPO_4	1.0g
$MgSO_4 \cdot 7H_2O$, anhydrous	0.1g

Preparation of Mineral Base Medium: Add components to distilled/deionized water and bring volume to 500.0mL. Mix thoroughly. Gently heat until dissolved. Filter sterilize. Warm to 45°–50°C.

Preparation of Medium: Combine 500.0mL of cooled, sterile agar solution and 500.0mL of sterile mineral base medium. Mix thoroughly. Aseptically distribute into sterile tubes. Allow tubes to cool in a slanted position.

Use: For the cultivation and differentiation of microorganisms based on their ability to utilize a particular carbon source.

Carbon Assimilation Medium, Auxanographic Method for Yeast Identification

Composition per liter:

Noble agar	20.0g
$(NH_4)_2SO_4$	0.5g
KH_2PO_4	0.1g
$MgSO_4 \cdot 7H_2O$	0.05g
NaCl	0.01g
$CaCl_2 \cdot 2H_2O$	0.01g
DL-Methionine	2.0mg
DL-Tryptophan	2.0mg
L-Histidine·HCl	1.0mg
Inositol	0.2mg
KI	0.01mg
H_3BO_3	0.05mg
$ZnSO_4 \cdot 7H_2O$	0.04mg
$MnSO_4 \cdot 4H_2O$	0.04mg
Thiamine·HCl	0.04mg
Pyroxidine·HCl	0.04mg
Niacin	0.04mg
Calcium pantothenate	0.04mg
p-Aminobenzoic acid	0.02mg
Riboflavin	0.02mg
$FeCl_3$	0.02mg
$Na_2MoO_4 \cdot 4H_2O$	0.02mg
$CuSO_4 \cdot 5H_2O$	4.0µg
Folic acid	0.2µg
Biotin	0.2µg

pH 4.5 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into screw-capped tubes in 20.0mL volumes. Autoclave for 15 min at 15 psi pressure–121°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For carbohydrate assimilation tests by the auxanographic method for the identification of yeasts.

Casein Hydrolysate Yeast Extract Salts HiVeg Broth Base with Tracer Salts (CAYES)

Composition per liter:

Plant acid hydrolysate	20.0g
K_2HPO_4	8.71g
Yeast extract	6.0g
NaCl	2.5g
Tracer salts solution	1.0mL

pH 7.0 ± 0.2 at 25°C

Source: This medium, without tracer salts solution, is available as a premixed powder from HiMedia.

Tracer Salts Solution:
Composition per 10.0mL:

$MgSO_4$	0.5g
$MnCl_2$	0.05g
$FeCl_3$	0.05g
Sulfuric acid, 1*N*	10.0mL

Preparation of Tracer Salts Solution: Add components to 0.1*N* sulfuric acid and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For agar dilution susceptibility tests with imidazole antifungal agents.

Casein Yeast Extract Glucose Agar (CYG Agar)

Composition per liter:

Agar	20.0g
Glucose	5.0g
Casein hydrolysate	5.0g
Yeast extract	5.0g

pH 7.0 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For agar dilution susceptibility tests with imidazole antifungal agents.

Casein Yeast Extract Glucose Broth (CYG Broth)

Composition per liter:

Casein hydrolysate	5.0g
Glucose	5.0g
Yeast extract	5.0g

pH 7.0 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For agar dilution susceptibility tests with imidazole antifungal agents.

Christensen's Urea Agar

Composition per liter:

Agar	15.0g
NaCl	5.0g
KH_2PO_4	2.0g
Peptone	1.0g
Glucose	1.0g
Phenol Red	0.012g
Urea solution	100.0mL

pH 6.8 ± 0.1 at 25°C

Urea Solution:

Composition per 100.0mL:

Urea	20.0g

Preparation of Urea: Add urea to 100.0mL of distilled/deionized water. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except urea solution, to distilled/deionized water and bring volume to 900.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 50–55°C. Aseptically add 100.0mL of sterile urea solution. Mix thoroughly. Pour into Petri dishes or distribute into sterile tubes. Allow tubes to solidify in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of a variety of fungi on the basis of urease production.

CHROMagar™ *Candida*

Composition per liter:

Glucose	20.0g
Agar	15.0g
Peptone	10.0g
Chromogenic mix	2.0g
Chloramphenicol	0.5g

Source: CHROMagar *Candida* is available from CHROMagar Microbiology. Prepared medium is also available from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat in a boiling water bath or steam bath. Shake periodically during heating to dissolve components. Heat long enough with shaking every 5 min to ensure complete dissolution. Do not overheat. Cool to 45–50°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store in the dark. Chromogenic agars are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Prepared media plates can be kept for one day at ambient temperature. Plates can be stored at least one week under refrigeration (2-8°C) if properly prepared and protected from light and dehydration. Do not use after the expiration date supplied by the manufacturer.

Use: For the differentiation of *Candida* spp. Specific *Candida* spp. give characteristic color reactions, e.g., *Candida albicans* produce distinctive green colonies and *Candida tropicalis* produce distinctive dark blue-gray colonies.

CHROMagar™ *Malassezia* Medium

Composition per liter:

Peptones and extracts	38.0g

Agar 15.0g
Chromogenic mix 2.8g
Chloramphenicol 0.5g
Tween™ 40 ..... 10.0mL

Source: This medium is available from CHROMagar, Paris, France.

Preparation of Medium: Add components, to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Do not autoclave. Continue heating until complete fusion of the agar grains has taken place (large bubbles replacing foam). Cool to 50°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store in the dark. Chromogenic agars are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Prepared media plates can be kept for one day at ambient temperature. Plates can be stored at least one week under refrigeration (2-8°C) if properly prepared and protected from light and dehydration. Do not use after the expiration date supplied by the manufacturer.

Use: For the cultivation of *Malassezia* species.

CHROMagar™ *Malassezia* Medium

Composition per liter:
Peptones and extracts 38.0g
Agar 15.0g
Chromogenic mix 2.8g
Chloramphenicol 0.5g
Glycerol 1.0g
Tween™ 60 ..... 0.5g

pH 6.1± 0.2 at 25°C

Source: This medium is available from CHROMagar, Paris, France.

Preparation of Medium: Add components, to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Do not autoclave. Continue heating until complete fusion of the agar grains has taken place (large bubbles replacing foam). Cool to 50°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store in the dark. Chromogenic agars are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Prepared media plates can be kept for one day at ambient temperature. Plates can be stored at least one week under refrigeration (2-8°C) if properly prepared and protected from light and dehydration. Do not use after the expiration date supplied by the manufacturer.

Use: For the cultivation of *Malassezia* species.

chromID™ *Candida*

Composition per liter:
Proprietary.

Source: This medium is available from bioMérieux.

Preparation of Medium: Available as a prepared medium

Storage/Shelf Life: Prepared media should be stored in the dark under refrigeration (2-8°C). Chromogenic agars are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation of yeasts and the direct identification of *Candida albicans. C. albicans* form blue colonies. *C. tropicalis, C. kefyr,* and *C. lustrianiae form pink colonies.*

Chromogenic *Candida* Agar

Composition per liter:
Chromogenic mix 13.6g
Agar 13.6g
Peptone 4.0g
Selective supplement solution 10.0mL

pH 6.0 ± 0.2 at 25°C

Source: This medium is available from Oxoid Unipath.

Selective Supplement Solution:
Composition per 10.0mL:
Chloramphenicol 500.0mg

Preparation of Selective Supplement Solution: Add chloramphenicol to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0mL. Mix thoroughly. Gently heat while stirring and bring to boiling. Do not autoclave. Cool to 45°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored in the dark under refrigeration (2-8°C). Chromogenic agars are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the rapid isolation and identification of clinically important *Candida* species. The medium incorporates two chromogens that indicate the presence of the target enzymes: X-NAG (5-bromo-4-chloro-3-indolyl N acetyl ß-D-glucosaminide) detects the activity of hexosaminidase. BCIP (5-bromo-6-chloro-3-indolyl phosphate p-toluidine salt) detects alkaline phosphatase activity. An opaque agent has been incorporated into the formulation to improve the color definition on the agar. The broad-spectrum antibacterial agent chloramphenicol is added to the agar to inhibit bacterial growth on the plates.

CN Screen Medium (*Cryptococcus neoformans* Screen Medium)

Composition per liter:
Agar 15.0g
K_2HPO_4 ..... 4.0g
$MgSO_4 \cdot 7H_2O$ 2.5g
Glucose 1.25g
Asparagine 1.0g
Glutamine 1.0g
Glycine 1.0g
Thiamine·HCl 1.0g
Tryptophan 1.0g
EDTA 0.6g
Biotin 0.51g
Dihydroxyphenylalanine (Dopa) 0.2g
Phenol Red 0.2g

pH 5.5–5.6 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat until boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the screening of yeast isolates for the presumptive identification of *Cryptococcus neoformans*. *Cryptococcus neoformans* forms black colonies.

Colorex™ *Candida*

Composition per liter:

Glucose 20.0g
Agar 15.0g
Peptone.....10.0g
Chromogenic mix 2.0g
Chloramphenicol.....0.5g

Source: Available as prepared plates from E&O Laboratories, Bonnybridge Scotland.

Storage/Shelf Life: Store in the dark. Chromogenic agars are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Prepared media plates can be kept for one day at ambient temperature. Plates can be stored at least one week under refrigeration (2-8°C) if properly prepared and protected from light and dehydration. Do not use after the expiration date supplied by the manufacturer.

Use: For the differentiation of *Candida* spp. Specific *Candida* spp. give characteristic color reactions, e.g., *Candida albicans* produce distinctive green colonies and *Candida tropicalis* produce distinctive dark blue-gray colonies.

Cornmeal Agar

Composition per liter:

Agar 15.0g
Cornmeal, solids from infusion 2.0g

pH 5.6–6.0 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems and Oxoid Unipath.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat until boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation and maintenance of fungi.

Cornmeal Agar

Composition per liter:

Agar 15.0g
Corn meal extract (from 50g whole maize).....2.0g

pH 6.0 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For chlamydospore production by *Candida albicans* and for the maintenance of fungal cultures.

Cornmeal Agar with 1% Dextrose

Composition per liter:

Agar 15.0g
Cornmeal, solids from infusion 2.0g
Glucose 1.0g

pH 5.6–6.0 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems and Oxoid Unipath.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat until boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation and maintenance of fungi. For the differentiation of *Trichophyton rubrum* based upon red pigment production.

Cornmeal Agar with Dextrose and Tween

Composition per liter:

Agar 15.0g
Cornmeal, solids from infusion 2.0g
Glucose 2.0g
Tween™ 80.....1.0g

pH 5.6–6.0 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat until boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of fungi. For the differentiation of *Candida* species based upon mycelia appearance.

Cremophor EL Agar

Composition per liter:

Glucose	40.0g
Agar	15.0g
Mycological peptone	10.0g
Cremophor EL	10.0mL

pH 5.8 ± 0.2 at 25°C

Source: This medium is available from Sigma.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of *Malassezia* species.

Czapek Dox Agar

Composition per liter:

Sucrose	30.0g
Agar	15.0g
$NaNO_3$	3.0g
K_2HPO_4	1.0g
$MgSO_4 \cdot 7H_2O$	0.5g
KCl	0.5g
$FeSO_4 \cdot 7H_2O$	0.01g

pH 7.3 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of actinomycetes and fungi.

Czapek Dox Agar, Modified

Composition per liter:

Sucrose	30.0g
Agar	12.0g
$NaNO_3$	2.0g
Magnesium glycerophosphate	0.5g
KCl	0.5g
K_2SO_4	0.35g
$FeSO_4$	0.01g

pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Oxoid Unipath and HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation and maintenance of numerous fungal species. For chlamydospore production by *Candida albicans*.

Dermasel Agar Base

Composition per liter:

Glucose	20.0g
Agar	14.5g
Papaic digest of soybean meal	10.0g
Antibiotic inhibitor	10.0mL

pH 6.8–7.0 at 25°C

Source: This medium is available as a premixed powder from Oxoid Unipath.

Antibiotic Inhibitor:

Composition per 10.0mL:

Cycloheximide	0.4g
Chloramphenicol	0.05g
Acetone	10.0mL

Preparation of Antibiotic Inhibitor: Add cycloheximide and chloramphenicol to 10.0mL of acetone. Mix thoroughly.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Do not overheat. Add antibiotic inhibitor. Mix thoroughly. Autoclave for 10 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation and cultivation of dermatophytic fungi isolated from hair, nails, or skin scrapings.

Dermatophyte Milk Agar

Composition per liter:

Skim milk powder	40.0g
Glucose	20.0g
Agar	15.0g
Bromcresol Purple	16.0mb
Ethanol	1.0mL

Source: This medium is available from Hardy Diagnostics.

Preparation of Medium: Available as prepared plates.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the identification of *Trichophyton* and other dermatophytes. Development of a violet-purple color around the fungal growth is indicative of an alkaline reaction. *Trichophyton mentagrophytes* produces diffuse growth and an alkanline reaction. *T. Rubrum* produces restricted growth and no color change in the medium—the colonies are red. *Microsporum persicolor* grows rapidly and diffusely but does not demonstrate an alkaline reaction.

Dermatophyte Test Medium

Composition per liter:

Agar	20.0g
Enzymatic digest of soybean meal	10.0g
Glucose	10.0g
Cycloheximide	0.5g
Phenol Red	0.2g
Selective supplement solution	10.0mL

pH 5.5 ± 0.2 at 25°C

Source: This medium is available from Acumedia, Neogen Corp.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

Selective Supplement Solution:

Composition per 10.0mL:

Gentamicin	0.1g
Chlortetracycline	0.1g

Preparation of Selective Supplement Solution: Add components to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Preparation of Medium: Add components, except selective supplement solution, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Distribute into tubes or flasks. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 50°C. Aseptically add 10.0mL selective supplement solution. Mix thoroughly. Pour into sterile Petri dishes or leave in tubes.

Use: For the selective isolation of dermatophytic fungi.

Dermatophyte Test Medium Base

Composition per liter:

Agar	20.0g
Glucose	10.0g
Papaic digest of soybean meal	10.0g
Cycloheximide	0.5g
Phenol Red	0.2g
Gentamycin sulfate	0.1g
Chlortetracycline	0.1g

pH 5.5 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

Preparation of Medium: Add components, except gentamycin sulfate and chlortetracycline, to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat while stirring and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add gentamycin sulfate and chlortetracycline. Mix thoroughly. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and cultivation of pathogenic fungi from cutaneous sources.

Dextrose Agar

Composition per liter:

Agar	15.0g
Glucose	10.0g
Tryptose	10.0g
NaCl	5.0g
Beef extract	3.0g

pH 7.3 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 20 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation and maintenance of a wide variety of microorganisms.

Dextrose HiVeg Agar Base, Emmons (Sabouraud Glucose HiVeg Agar Base, Modified)

Composition per liter:

Glucose	20.0g
Agar	17.0g
Plant special peptone	10.0g

pH 6.9 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to tap water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of dermatophytes and other pathogenic and nonpathogenic fungi from clinical speciments and nonclinical speci-

mens of public health importance. For the cultivation of yeast and filamentous fungi.

ESP Myco Medium

Composition per liter:
Proprietary.

Source: This medium is available from BD Diagnostic Systems and Trek Diagnositics; Cleveland, OH.

Storage/Shelf Life: Prepared medium should be stored under refrigeration (2-8°C). Use before the expiration date supplied by the manufacturer has passed.

Use: This medium is used with ESP Culture System II (TREK Diagnostic Systems) for the detection of mycobacterial growth. It is used for the detection and antibiotic susceptibility testing of *Mycobacterium tuberculosis*. The medium is composed of Middlebrook 7H9 broth enriched with glycerol, casitone, and cellulose sponge disks and OADC enrichment

Fermentation Broth (CHO Medium)

Composition per liter:

Pancreatic digest of casein	15.0g
Yeast extract	7.0g
NaCl	2.5g
Agar	0.75g
Sodium thioglycolate	0.5g
L-Cystine	0.25g
Ascorbic acid	0.1g
Bromthymol Blue	0.01g
Carbohydrate or starch solution	100.0mL

pH 7.0 ± 0.1 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Carbohydrate Solution:
Composition per 100.0mL:

Carbohydrate	6.0g

Preparation of Carbohydrate Solution: Add carbohydrate to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Starch Solution:
Composition per 100.0mL:

Starch	2.5g

Preparation of Starch Solution: Add starch to distilled/deionized water and bring volume to 100.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except carbohydrate solution, to distilled/deionized water and bring volume to 900.0mL. Mix thoroughly. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 100.0mL of sterile carbohydrate solution. Mix thoroughly. Aseptically distribute into sterile tubes or flasks. Loosen caps on tubes. Place in an anaerobic chamber under an atmosphere of 85% N_2, 10% H_2, and 5% CO_2. Fasten the caps securely or maintain in an anaerobic chamber.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of fungi based upon carbohydrate fermentation. Fungi that ferment the specific carbohydrates added to the medium turn the medium yellow.

Fluconazole Testing Medium

Composition per liter:

Glucose	19.98g
$(NH_4)_2SO_4$	4.99g
KH_2PO_4	1.99g
$MgSO_4 \cdot 7H_2O$ anhydrous	0.99g
L-Glutamine	0.58g
NaCl	0.2g
$CaCl_2 \cdot 2H_2O$	0.2g
L-Lysine monohydrochloride	0.073g
L-Isoleucine	0.052g
L-Leucine	0.052g
Threonine	0.0476g
Valine	0.047g
L-Arginine monohydrochloride	0.042g
L-Histidine	0.023g
Tryptophan	0.02g
DL-Methionine	0.0189g
Inositol	0.00397g
$ZnSO_4 \cdot 7H_2O$	0.0014g
H_3BO_3	0.00099g
Nicotinic acid	0.00079g
Pyridoxine hydrochloride	0.00079g
Calcium D-pantothenic acid	0.00079g
Aneurine hydrochloride	0.00079g
$MnSO_4 \cdot 2H_2O$	0.00079g
$Na_2MoO_4 \cdot 2H_2O$	0.00047g
p-Amino benzoic acid (PABA)	0.000395g
Riboflavin	0.000395g
$FeCl_3$	0.000395g
Folic acid	0.000395g
KI	0.0002g
$CuSO_4 \cdot 5H_2O$	0.00012g
Biotin crystalline	0.000004g
Agar solution	100.0mL

Source: This medium is available from HiMedia.

Agar Solution:
Composition per 100.0mL:

Agar	10.0g

Preparation of Agar Solution: Add agar to distilled/deionized water and bring volume to 100.0mL. Mix thoroughly. Adjust pH to 7.5 with phosphate buffer. Autoclave for 10 min at 10 psi pressure–115 °C. Cool to 50°C.

Preparation of Medium: Add components, except agar solution, to distilled/deionized water and bring volume to 900.0mL. Mix thoroughly. Filter sterilize. Aseptically add agar solution. Mix thoroughly. Pour into Petri dishes or aseptically distribute into sterile tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For fluconazole susceptibility testing using *Candida* species.

Fungi Kimmig HiVeg Agar Base

Composition per liter:

Agar	15.0g
NaCl	11.4g
Glucose	10.0g
Plant peptone	9.3g
Plant hydrolysate	4.3g
Glycerol	5.0mL

pH 6.5 ± 0.2 at 25°C

Source: This medium without glycerol, is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Mix thoroughly. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation, isolation, identification, and strain preservation of fungi.

Fungi Kimmig Selective Agar

Composition per liter:

Glucose	19.0g
Agar	15.0g
Peptone	15.0g
NaCl	1.0g
Glycerol	5.0mL
Selective solution	10.0mL

pH 6.5 ± 0.2 at 25°C

Selective Solution:

Composition per 10.0mL:

Cycloheximide	0.4g
Streptomycin	0.04mg
Penicillin	40,000U

Preparation of Selective Solution: Add components to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

Preparation of Medium: Add components, except selective solution, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Mix thoroughly. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 10.0mL selective solution. Mix thoroughly. Distribute into tubes or flasks. Autoclave for 5 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation, isolation, identification, and strain preservation of pathogenic fungi.

Fungi Kimmig Selective Agar

Composition per liter:

Glucose	19.0g
Agar	15.0g
Peptone	15.0g
NaCl	1.0g
Glycerol	5.0mL
Selective solution	10.0mL

pH 6.5 ± 0.2 at 25°C

Selective Solution:

Composition per 10.0mL:

Novobiocin	0.1g
Colistin	0.08g

Preparation of Selective Solution: Add components to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except selective solution, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Mix thoroughly. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 10.0mL selective solution. Mix thoroughly. Distribute into tubes or flasks.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation, isolation, identification, and strain preservation of pathogenic fungi.

HardyCHROM™ *Candida*

Composition per liter:

Proprietary

Source: This medium is available from Hardy Diagnostics.

Preparation of Medium: Available as prepared plates.

Storage/Shelf Life: Store in the dark under refrigeration (2-8°C). Chromogenic agars are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Do not use after the expiration date supplied by the manufacturer.

Use: For the isolation and differentiation of clinically important yeast species. This medium is especially useful in detecting mixed yeast infections. *Candida glabrata* produces smooth pink colonies, often with a darker mauve center. *C. tropicalis* produces smooth medium blue to dark metallic blue colonies, with a blue halo. *C. krusei* produces large rough or crenated pink to medium pink colonies. *C. albicans* produces smooth emerald green to metallic green colonies.

HiCrome™ *Candida* Agar

Composition per liter:

Agar	15.0g
Peptic digest of animal tissue	15.0g
Chromogenic mixture	11.22g

K_2HPO_4.....1.0g
Chloramphenicol.....0.5g

pH 6.9 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly and heat with frequent agitation until boiling. Boil until components are fully dissolved. Do not autoclave. Cool to 45°–50°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared plates should be stored in the dark under refrigeration (2-8°C). Chromogenic media are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the rapid isolation and identification of *Candida* species from mixed cultures.

HiCrome™ *Candida* Agar, HiVeg

Composition per liter:

Agar 15.0g
Plant peptone.....15.0g
Chromogenic mixture 11.2g
K_2HPO_4.....1.0g
Chloramphenicol.....0.5g

pH 6.9 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly and heat with frequent agitation until boiling. Boil until components are fully dissolved. Do not autoclave. Cool to 45°–50°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared plates should be stored in the dark under refrigeration (2-8°C). Chromogenic media are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the rapid isolation and identification of *Candida* species from mixed cultures.

HiCrome™ *Candida* Differential Agar Base with *Candida* Selective Supplement

Composition per liter:

Agar 15.0g
Peptone, special 15.0g
Yeast extract.....4.0g
Chromogenic mixture 7.220g
K_2HPO_4 .....1.0g
Chloramphenicol.....0.5g
Gentamicin solution..... 1.0mL

pH 7.2 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

***Candida* Selective Supplement:**

Composition per 10.0mL:

Gentamicin.....0.1g

Preparation of *Candida* Selective Supplement: Add gentamicin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except *Candida* selective supplement, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Do not autoclave. Do not overheat. Cool to 50°C. Aseptically add 10.0mL *Candida* selective supplement. Mix thoroughly. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared plates should be stored in the dark under refrigeration (2-8°C). Chromogenic media are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the rapid isolation and identification of *Candida* species from mixed cultures.

HiCrome™ *Candida* Differential Agar Base, Modified with *Candida* Selective Supplement

Composition per liter:

Agar 18.0g
Glucose 10.0g
Peptic digest of animal tissue 5.0g
Malt extract.....3.0g
Yeast extract.....3.0g
Chromogenic mixture 3.0g
Chloramphenicol.....0.05g
Gentamicin solution..... 1.0mL

pH 7.2 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

***Candida* Selective Supplement:**

Composition per 10.0mL:

Gentamicin.....0.1g

Preparation of *Candida* Selective Supplement: Add gentamicin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except *Candida* selective supplement, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Do not autoclave. Do not overheat. Cool to 50°C. Aseptically add 10.0mL *Candida* selective supplement. Mix thoroughly. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared plates should be stored in the dark under refrigeration (2-8°C). Chromogenic media are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the rapid isolation and identification of *Candida* species from mixed cultures.

HiCrome™ *Candida* HiVeg Agar Base, Modified wtih *Candida* Selective Supplement

Composition per liter:

Agar	18.0g
Glucose	10.0g
Plant peptone	5.0g
Malt extract	3.0g
Yeast extract	3.0g
Chromogenic mixture	3.0g
Chloramphenicol	0.05g
Gentamicn solution	1.0mL

pH 7.2 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

***Candida* Selective Supplement:**

Composition per 10.0mL:

Gentamicin	0.1g

Preparation of *Candida* Selective Supplement: Add gentamicin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except *Candida* selective supplement, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Do not autoclave. Do not overheat. Cool to 50°C. Aseptically add 10.0mL *Candida* selective supplement. Mix thoroughly. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared plates should be stored in the dark under refrigeration (2-8°C). Chromogenic media are especially light and temperature sensitive; protect from light, excessive heat, moisture, and freezing. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the rapid isolation and identification of *Candida* species from mixed cultures.

Inhibitory Mold Agar

Composition per liter:

Agar	15.0g
Glucose	5.0g
Yeast extract	5.0g
Pancreatic digest of casein	3.0g
Na_2HPO_4	2.0g
Peptic digest of animal tissue	2.0g
Starch	2.0g
Dextrin	1.0g
$MgSO_4 \cdot 7H_2O$	0.8g
Chloramphenicol	0.125g
$FeSO_4$	0.04g
NaCl	0.04g
$MnSO_4$	0.16g

pH 6.7 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling with frequent agitation. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation of pathogenic fungi.

Kimmig's Agar

Composition per liter:

Agar	15.0g
Glucose	10.0g
Pancreatic digest of gelatin	9.5g
Beef extract	5.5g
NaCl	5.0g
Peptone	5.0g
Glycerol	5.0mL

pH 6.9 ± 0.2 at 35°C

Preparation of Medium: Add glycerol and then other components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the assay of fungistatic agents. For agar dilution testing of antifungal agents. For the cultivation and preservation of various fungi.

Kimmig Fungi HiVeg Agar Base with Kimmig Supplement

Composition per liter:

Glucose	19.0g
Plant peptone	15.0g
Agar	15.0g
NaCl	1.0g
Cycloheximide	0.4g
Kimmig selective supplement	10.0mL
Glycerol	5.0mL

pH 6.9 ± 0.2 at 35°C

Source: This medium, without glycerol or Kimmig selective supplement, is available as a premixed powder from HiMedia.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

Kimmig Selective Supplement:

Composition per 10.0mL:

Novobiocin	200.0mg
Colistin sulfate	80.0mg

Preparation of Kimmig Selective Supplement: Add components to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add glycerol and then other components, except Kimmig selective supplement, to distilled/deionized water and

bring volume to 990.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 50°C. Aseptically add 10.0mL sterile Kimmig selective supplement. Mix thoroughly Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the assay of fungistatic agents. For agar dilution testing of antifungal agents. For the cultivation and preservation of various fungi.

Kimmig Fungi HiVeg Agar Base with George Kimmig Supplement

Composition per liter:

Glucose	19.0g
Plant peptone	15.0g
Agar	15.0g
NaCl	1.0g
Cycloheximide	0.4g
George Kimmig selective supplement	10.0mL
Glycerol	5.0mL

pH 6.9 ± 0.2 at 35°C

Source: This medium, without glycertol or George Kimmig selective supplement, is available as a premixed powder from HiMedia.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

George Kimmig Selective Supplement:

Composition per 10.0mL:

Penicillin G	40,000U
Streptomycin	40,000U

Preparation of George Kimmig Selective Supplement: Add components to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add glycerol and then other components, except George Kimmig selective supplement, to distilled/deionized water and bring volume to 990.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 50°C. Aseptically add 10.0mL sterile George Kimmig selective supplement. Mix thoroughly Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the assay of fungistatic agents. For agar dilution testing of antifungal agents. For the cultivation and preservation of various fungi.

Lactirmel Agar (Borelli's Medium)

Composition per liter:

Agar	15.0g
Honey	10.0g
Skim milk powder (Dutch Jug skimmed milk powder)	7.0g
Cornmeal extract (from 50g whole maize)	2.0g
Chloramphenicol	250.0mg

pH 6.0 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add skim milk to distilled/deionized water and bring volume to approximately 150mL. Mix thoroughly until it forms a paste. Add honey and other components. Bring volume to 1.0L. Gently bring to boil and mix thoroughly. Do not adjust pH. Autoclave for 10 min at 10 psi pressure–115°C. Allow to stand for 5 min. Mix thoroughly. Pour into sterile Petri dishes or distribute into sterile tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differential identification of dermatophytes based upon the production of pigment by *Trichophyton rubrum.*

Leeming and Notman Agar

Composition per liter:

Agar	15.0g
Peptone	10.0g
Glucose	10.0g
Ox bile	8.0g
Yeast extract	2.0g
Glycerol monostearate	0.5g
Olive oil	20.0mL
Glycerol	10.0mL
Tween™ 60	5.0mL

pH 6.0 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of *Malassezia* species.

Littman Oxgall Agar

Composition per liter:

Agar	20.0g
Oxgall	15.0g
Glucose	10.0g
Peptone	10.0g
Crystal Violet	0.01g
Streptomycin solution	10.0mL

pH 6.5 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Streptomycin Solution:
Composition per 10.0mL:
Streptomycin 0.03g

Preparation of Streptomycin Solution: Add streptomycin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except streptomycin solution, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add sterile streptomycin solution. Mix thoroughly. Pour into sterile Petri dishes or distribute into sterile tubes. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and cultivation of fungi, especially dermatophytes.

Littman Oxgall HiVeg Agar Base with Streptomycin

Composition per liter:
Agar 20.0g
Plant peptone 20.0g
Glucose 10.0g
Synthetic detergent No. II 5.0g
Crystal Violet 0.01g
Streptomycin solution 10.0mL
pH 7.0 ± 0.2 at 25°C

Source: This medium, without streptomycin, is available as a premixed powder from HiMedia.

Streptomycin Solution:
Composition per 10.0mL:
Streptomycin 0.03g

Preparation of Streptomycin Solution: Add streptomycin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except streptomycin solution, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add sterile streptomycin solution. Mix thoroughly. Pour into sterile Petri dishes or distribute into sterile tubes. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and cultivation of fungi, especially dermatophytes.

Littman Oxgall HiVeg Broth Base with Streptomycin

Composition per liter:
Plant peptone 20.0g
Glucose 10.0g
Synthetic detergent No. II 5.0g
Crystal violet 0.01g
Streptomycin solution 10.0mL
pH 7.0 ± 0.2 at 25°C

Source: This medium, without streptomycin, is available as a premixed powder from HiMedia.

Streptomycin Solution:
Composition per 10.0mL:
Streptomycin 0.03g

Preparation of Streptomycin Solution: Add streptomycin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except streptomycin solution, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add sterile streptomycin solution. Mix thoroughly. Aseptically distribute into sterile tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective cultivation of fungi, especially dermatophytes.

Malt Extract Agar for Yeasts and Molds (MEAYM) (BAM M182)

Composition per liter:
Agar 20.0g
Glucose 20.0g
Malt extract 20.0g
Peptone 1.0g
pH 5.4 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation, cultivation, and identification of heat-resistant filamentous fungi (molds) from foods. Recommended for identification of *Aspergillus* spp. and *Penicillium* spp.

Modified Fungal Agar Base (Modified Inhibitory Mold Agar)

Composition per liter:
Glucose 20.0g
Agar 15.0g
Casein enzymic hydrolysate 2.5g
Peptic digest of animal tissue 2.5g
Yeast extract 5.0g
Na_2HPO_4 ..... 3.5g

KH_2PO_4 ..... 3.4g
NH_4Cl 1.4g
$NaCO_3$ 1.0g
Chloramphenicol 0.1g
$MgSO_4 \cdot 7H_2O$ 0.06g
Polysorbate 80 ..... 20.0mL

pH 7.0 ± 0.2 at 25°C

Source: This medium is available from HiMedia.

Preparation of Medium: Add components, except polysorbate 80, to distilled/deionized water and bring volume to 980.0mL. Mix thoroughly. Gently heat and bring to boiling. Add polysorbate 80. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Mix thoroughly. Pour into Petri dishes or aseptically distribute into sterile tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the detection and enumeration of molds in cosmetics and toiletries.

Modified Fungal HiVeg Agar Base
(Modified Inhibitory Mold HiVeg Agar Base)

Composition per liter:

Glucose 20.0g
Agar 15.0g
Yeast extract 5.0g
Na_2HPO_4 ..... 3.5g
KH_2PO_4 ..... 3.4g
Plant hydrolysate 2.5g
Plant peptone 2.5g
NH_4Cl 1.4g
Na_2CO_3 ..... 1.0g
Chloramphenicol 0.1g
$MgSO_4$ 0.06g
Polysorbate 80 ..... 20.0mL

pH 7.0 ± 0.2 at 25°C

Source: This medium, without polysorbate 80, is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling with frequent agitation. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation of pathogenic fungi.

Mycobiotic Agar
(Cycloheximide Chloramphenicol Agar)

Composition per liter:

Agar 15.0g
Enzymatic hydrolysate of soybean meal 10.0g
Glucose 10.0g
Cycloheximide 0.5g
Chloramphenicol 0.05g

pH 6.5 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Cool tubes quickly in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and cultivation of pathogenic fungi.

NigerSeed Agar
(Bird Seed Agar)

Composition per liter:

Agar 15.0g
Glucose 15.0g
Creatinine 5.0g
KH_2PO_4 ..... 3.0g
Biphenyl 1.0g
Chloramphenicol 0.5g
Guizotia abyssinica seed (niger seed) extract 1000.0mL

pH 6.7 ± 0.2 at 25°C

Preparation of Medium: Prepare seed extract by grinding 50.0g of *Guizotia abyssinica* seed in 1.0L of distilled/deionized water. Boil for 30 min. Filter through cheesecloth and filter paper. Add remaining components to seed filtrate. Mix thoroughly and heat with frequent agitation until boiling. Distribute into flasks or tubes. Autoclave for 25 min at 15 psi pressure–110°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and differentiation of *Cryptococcus neoformans* from other *Cryptococcus* species and other yeasts. *Cryptococcus* species, notably *C. neoformans* and *C. gattii*, form tan to brown colonies whereas other yeasts form beige or cream colored colonies.

Pablum Cereal Agar

Composition per liter:

Pablum cereal, precooked 100.0g
Agar 18.0g
Chloramphenicol 0.05g

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of dematiaceous fungi and stimulation of spore formation.

Pagano Levin Agar

Composition per liter:

Glucose	40.0g
Agar	15.0g
Peptone	10.0g
Yeast extract	1.0g
Neomycin	0.5g
2,3,5-Triphenyltetrazolium chloride	0.1g

pH 6.0 ± 0.1 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components, except neomycin and 2,3,5-triphenyltetrazolium chloride, to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add neomycin and 2,3,5-triphenyltetrazolium chloride. Mix thoroughly. Pour into sterile Petri dishes or distribute into sterile tubes. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation, cultivation, and differentiation of *Candida* species. *Candida albicans* appears as smooth, shiny, cream-light pink colonies.

Potato Dextrose Agar (PDA Agar)

Composition per liter:

Glucose	20.0g
Agar	15.0g
Potato, infusion from	4.0g
Tartaric acid solution	14.0mL

pH 5.6 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems and Oxoid Unipath.

Tartaric Acid Solution:

Composition per 50.0mL:

Tartaric acid	5.0g

Preparation of Tartaric Acid Solution: Add tartaric acid to distilled/deionized water and bring volume to 50.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 986.0mL. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 14.0mL of sterile tartaric acid solution. Mix thoroughly. If medium is to be used for the enumeration of yeasts and molds in butter, adjust pH to 3.5. Pour into sterile Petri dishes or distribute into sterile tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation and enumeration of yeasts and molds. For the enumeration of yeasts and molds in butter by the plate count method.

Potato Dextrose Agar (PDA Agar)

Composition per liter:

Agar	20.0g
Glucose	20.0g
Potato infusion	200.0mL

pH 5.6 ± 0.2 at 25°C

Potato Infusion:

Composition per 10.0mL:

Potatoes, unpeeled and sliced	200.0g

Preparation of Potato Infusion: Add potato slices to 1.0L of distilled/deionized water. Gently heat and bring to boiling. Continue boiling for 30 min. Filter through cheesecloth. Reserve filtrate.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation and enumeration of yeasts and filamentous fungi (molds) from foods.

Potato Flakes Agar

Composition per liter:

Potato flakes	20.0g
Agar	15.0g
Glucose	10.0g

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation and induction of sporulation in all fungi.

Rose Bengal Chloramphenicol Agar

Composition per liter:

Agar	15.0g
Glucose	10.0g
Papaic digest of soybean meal	5.0g
KH_2PO_4	1.0g
$MgSO_4 \cdot 7H_2O$	0.5g
Rose Bengal	0.05g
Chloramphenicol solution	10.0mL

pH 7.0 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems and Oxoid Unipath.

Chloramphenicol Solution:
Composition per 10.0mL:

Chloramphenicol	0.1g

Preparation of Chloramphenicol Solution: Add chloramphenicol to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except chloramphenicol solution, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°C. Aseptically add sterile chloramphenicol solution. Mix thoroughly. Pour into sterile Petri dishes or distribute into sterile tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation, cultivation, and enumeration of yeasts and molds from environmental specimens and foods.

Rose Bengal Chloramphenicol HiVeg Agar

Composition per liter:

Agar	15.5g
Glucose	10.0g
Plant peptone No. 4	5.0g
KH_2PO_4	1.0g
$MgSO_4$	0.5g
Rose Bengal	0.05g
Chloramphenicol solution	10.0mL

pH 7.2 ± 0.2 at 25°C

Source: This medium, without chloramphenicol, is available as a premixed powder from HiMedia.

Chloramphenicol Solution:
Composition per 10.0mL:

Chloramphenicol	0.1g

Preparation of Chloramphenicol Solution: Add chloramphenicol to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except chloramphenicol solution, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°C. Aseptically add sterile chloramphenicol solution. Mix thoroughly. Pour into sterile Petri dishes or distribute into sterile tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation, cultivation, and enumeration of yeasts and molds from environmental specimens and foods.

SABHI Agar
(Sabouraud Glucose and Brain Heart Infusion Agar)

Composition per liter:

Glucose	21.0g
Agar	15.0g
Pancreatic digest of casein	10.5g
Peptic digest of animal tissue	5.0g
Brain heart, solids from infusion	4.0g
NaCl	2.5g
Na_2HPO_4	1.25g

pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes in 20.0mL volumes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of dermatophytes and other pathogenic and nonpathogenic fungi from clinical and nonclinical specimens.

SABHI Agar

Composition per liter:

Beef heart, infusion from	125.0g
Calf brains, infusion from	100.0g
Glucose	21.0g
Agar	15.0g
Neopeptone	5.0g
Proteose peptone	5.0g
NaCl	2.5g
Na_2HPO_4	1.25g
Chloromycetin solution	1.0mL

pH 7.0 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Chloromycetin Solution:
Composition per 10.0mL:

Chloromycetin	1.0g

Preparation of Chloromycetin Solution: Add chloromycetin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except chloromycetin solution, to distilled/deionized water and bring volume to 999.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 1.0mL of sterile chloromycetin solution. Mix thoroughly. Aseptically distribute into sterile tubes in 5.0mL volumes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of dermatophytes and other pathogenic and nonpathogenic fungi from clinical and nonclinical specimens.

SABHI Agar, Modified

Composition per liter:

Beef heart, infusion from	62.5g
Calf brain, infusion from	50.0g
Glucose	20.5g
Brain heart infusion broth	18.6g
Agar	7.5g
Neopeptone	5.0g
Pancreatic digest of gelatin	2.5g
NaCl	1.25g
Na_2HPO_4	0.625g

pH 6.8 ± 0.2 at 25°C

Preparation of Medium: Dissolve, then autoclave at 121°C for 15 min. Cool to 50°C and add 1.0mL of sterile chloramphenicol solution (100.0mg/mL). Mix well and dispense into sterile tubes. Slant and allow to harden. Refrigerate until needed.

Use: For the cultivation of dermatophytes and other pathogenic and nonpathogenic fungi from clinical and nonclinical specimens.

SABHI Blood Agar

Composition per liter:

Beef heart, infusion from	125.0g
Calf brains, infusion from	100.0g
Glucose	21.0g
Agar	15.0g
Neopeptone	5.0g
Proteose peptone	5.0g
NaCl	2.5g
Na_2HPO_4	1.25g
Blood	100.0mL
Chloromycetin solution	1.0mL

pH 7.0 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Chloromycetin Solution:
Composition per 10.0mL:

Chloromycetin	1.0g

Preparation of Chloromycetin Solution: Add chloromycetin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except blood and chloromycetin solution, to distilled/deionized water and bring volume to 899.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 100.0mL of sterile blood and 1.0mL of sterile chloromycetin solution. Sheep blood or human blood may be used. Mix thoroughly. Aseptically distribute into sterile tubes in 5.0mL volumes.

Use: For the cultivation of dermatophytes and other pathogenic and nonpathogenic fungi from clinical and nonclinical specimens. Blood enhances the recovery of *Blastomyces dermatitidis* and *Histoplasma capsulatum* and their conversion to the yeast phase.

SABHI HiVeg Agar Base with Chloramphenicol

Composition per liter:

Glucose	21.0g
Agar	15.0g
Plant infusion	5.14g
Plant peptone No. 3	5.0g
Plant special peptone	5.0g
Plant special infusion	4.11g
NaCl	2.5g
Na_2HPO_4	1.25g
Chloramphenicol solution	10.0mL

pH 7.0 ± 0.2 at 25°C

Source: This medium, without chloramphenicol, is available as a premixed powder from HiMedia.

Chloramphenicol Solution:
Composition per 10.0mL:

Chloramphenicol	0.1g

Preparation of Chloramphenicol Solution: Add chloramphenicol to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except chloramphenicol solution, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 10.0mL of sterile chloramphenicol solution. Mix thoroughly. Pour into Petri dishes or aseptically distribute into sterile tubes.

Use: For the cultivation of dermatophytes and other pathogenic and nonpathogenic fungi from clinical and nonclinical specimens.

SABHI HiVeg Agar Base with Chloromycetin

Composition per liter:

Glucose	21.0g
Agar	15.0g
Plant infusion	5.14g
Plant peptone No. 3	5.0g
Plant special peptone	5.0g
Plant special infusion	4.11g
NaCl	2.5g
Na_2HPO_4	1.25g
Chloromycetin solution	1.0mL

pH 7.0 ± 0.2 at 25°C

Source: This medium, without chloromycetin, is available as a premixed powder from HiMedia.

Chloromycetin Solution:
Composition per 10.0mL:

Chloromycetin	1.0g

Preparation of Chloromycetin Solution: Add chloromycetin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except chloromycetin solution, to distilled/deionized water and bring volume to 999.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 1.0mL of sterile chloromycetin solution. Mix thoroughly. Aseptically distribute into sterile tubes in 5.0mL volumes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of dermatophytes and other pathogenic and nonpathogenic fungi from clinical and nonclinical specimens.

SABHI HiVeg Agar Base with Blood and Chloromycetin

Composition per liter:

Glucose	21.0g
Agar	15.0g
Plant infusion	5.14g
Plant peptone No. 3	5.0g
Plant special peptone	5.0g
Plant special infusion	4.11g
NaCl	2.5g
Na_2HPO_4	1.25g
Blood	100.0mL
Chloromycetin solution	1.0mL

pH 7.0 ± 0.2 at 25°C

Source: This medium, without blood and chloromycetin, is available as a premixed powder from HiMedia.

Chloromycetin Solution:

Composition per 10.0mL:

Chloromycetin	1.0g

Preparation of Chloromycetin Solution: Add chloromycetin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components, except blood and chloromycetin solution, to distilled/deionized water and bring volume to 899.0mL. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 100.0mL of sterile blood and 1.0mL of sterile chloromycetin solution. Sheep blood or human blood may be used. Mix thoroughly. Aseptically distribute into sterile tubes in 5.0mL volumes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of dermatophytes and other pathogenic and nonpathogenic fungi from clinical and nonclinical specimens. Blood enhances the recovery of *Blastomyces dermatitidis* and *Histoplasma capsulatum* and their conversion to the yeast phase.

Sabouraud Agar with CCG and 3% Sodium Chloride

Composition per 3031.5mL:

Glucose	120.0g
NaCl	90.0g
Agar	45.0g
Peptone	30.0g
Chloramphenicol solution	15.0mL
Cycloheximide solution	15.0mL
Gentamicin solution	1.5mL

Chloramphenicol Solution:

Composition per 15.0mL:

Chloramphenicol	0.15g

Preparation of Chloramphenicol Solution: Add chloramphenicol to distilled/deionized water and bring volume to 15.0mL. Mix thoroughly. Filter sterilize.

Cycloheximide Solution:

Composition per 15.0mL:

Cycloheximide	0.3g

Preparation of Cycloheximide Solution: Add cycloheximide to distilled/deionized water and bring volume to 15.0mL. Mix thoroughly. Filter sterilize.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

Gentamicin Solution:

Composition per 10.0mL:

Gentamicin	0.4g

Preparation of Gentamicin Solution: Add gentamicin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components—except chloramphenicol solution, cycloheximide solution, and gentamicin solution—to distilled/deionized water and bring volume to 3.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 15.0mL of sterile chloramphenicol solution, 15.0mL of sterile cycloheximide solution, and 1.5mL of sterile gentamicin solution. Mix thoroughly. Aseptically distribute into sterile tubes. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and cultivation of fungi from specimens with a mixed flora.

Sabouraud Agar with CCG and 5% Sodium Chloride

Composition per 3031.5mL:

NaCl	150.0g
Glucose	120.0g
Agar	45.0g
Peptone	30.0g
Chloramphenicol solution	15.0mL
Cycloheximide solution	15.0mL
Gentamicin solution	1.5mL

Chloramphenicol Solution:

Composition per 15.0mL:

Chloramphenicol.....0.15g

Preparation of Chloramphenicol Solution: Add chloramphenicol to distilled/deionized water and bring volume to 15.0mL. Mix thoroughly. Filter sterilize.

Cycloheximide Solution:

Composition per 15.0mL:

Cycloheximide.....0.3g

Preparation of Cycloheximide Solution: Add cycloheximide to distilled/deionized water and bring volume to 15.0mL. Mix thoroughly. Filter sterilize.

Caution: Cycloheximide is toxic. Avoid skin contact or aerosol formation and inhalation.

Gentamicin Solution:

Composition per 10.0mL:

Gentamicin.....0.4g

Preparation of Gentamicin Solution: Add gentamicin to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Preparation of Medium: Add components—except chloramphenicol solution, cycloheximide solution, and gentamicin solution—to distilled/deionized water and bring volume to 3.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 45°–50°C. Aseptically add 15.0mL of sterile chloramphenicol solution, 15.0mL of sterile cycloheximide solution, and 1.5mL of sterile gentamicin solution. Mix thoroughly. Aseptically distribute into sterile tubes. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and cultivation of fungi from specimens with a mixed flora.

Sabouraud Cycloheximide Chloramphenicol HiVeg Agar

Composition per liter:

Glucose.....20.0g
Agar.....15.0g
Plant peptone.....10.0g
Cycloheximide.....0.5g
Chloramphenicol.....0.04g

pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Caution: Cycloheximide is very toxic. Avoid skin contact or aerosol formation and inhalation.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation and cultivation of pathogenic fungi.

Saboraud Dextrose Agar (SDA)

Composition per liter:

Glucose.....40.0g
Agar.....15.0g
Mycological peptone.....10.0g

pH 5.6 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of yeast and filamentous fungi. For the cultivation of pathogenic and nonpathogenic fungi, especially dermatophytes, particularly *Malassezia* species. The medium may be made more selective for fungi by the addition of chloramphenicol. Fluconozole (final concentration of 8–16mg per mL) may also be added to test for antibiotic sensitivity.

Sabouraud Glucose Agar (Saboraud Dextrose Agar) (SabDex, 2%)

Composition per liter:

Glucose.....20.0g
Agar.....15.0g
Pancreatic digest of casein.....5.0g
Peptic digest of animal tissue.....5.0g

pH 5.6 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of yeast and filamentous fungi. For the cultivation of pathogenic and nonpathogenic fungi, especially dermatophytes. The medium may be made more selective for fungi by the addition of chloramphenicol. Fluconozole (final concentration of 8–16mg per mL) may also be added to test for antibiotic sensitivity.

Sabouraud Glucose Agar (Saboraud Dextrose Agar) (SabDex, 4%)

Composition per liter:

Glucose	40.0g
Agar	15.0g
Pancreatic digest of casein	5.0g
Peptic digest of animal tissue	5.0g

pH 5.6 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems and Oxoid Unipath.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of yeast and filamentous fungi. For the cultivation of pathogenic and nonpathogenic fungi, especially dermatophytes. The medium may be made more selective for fungi by the addition of chloramphenicol. Fluconozole (final concentration of 8–16mg per mL) may also be added to test for antibiotic sensitivity.

Sabouraud Glucose Agar, Emmons

Composition per liter:

Glucose	20.0g
Agar	17.0g
Pancreatic digest of casein	5.0g
Peptic digest of animal tissue	5.0g

pH 6.9 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 13 psi pressure–118°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of dermatophytes and other pathogenic and nonpathogenic fungi from clinical and nonclinical specimens. For the cultivation of yeast and filamentous fungi.

Sabouraud Glucose Agar, HiVeg

Composition per liter:

Glucose	40.0g
Agar	15.0g
Plant peptone No. 4	10.0g
Selective supplement	10.0mL

pH 6.9 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Selective Supplement:

Composition per 10.0mL:

Cycloheximide	0.5g
Chloramphenicol	0.04g

Preparation of Selective Supplement: Add components to distilled/deionized water and bring volume to 10.0mL. Mix thoroughly. Filter sterilize.

Caution: Cycloheximide is very toxic. Avoid skin contact or aerosol formation and inhalation.

Preparation of Medium: Add components, except selective supplement, to distilled/deionized water and bring volume to 990.0mL. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Cool to 50°C. Aseptically add 10.0mL sterile selective supplement. Mix thoroughly. Pour into sterile Petri dishes or aseptically distribute into tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of dermatophytes and other pathogenic and nonpathogenic fungi from clinical and nonclinical specimens. For the cultivation of yeast and filamentous fungi.

Sabouraud Glucose HiVeg Broth (Sabouraud Liquid HiVeg Medium)

Composition per liter:

Glucose	20.0g
Plant special peptone	10.0g

pH 5.6 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of pathogenic and nonpathogenic fungi, especially dermatophytes. The medium may be made more selective for fungi by the addition of chloramphenicol.

Sensitest Agar

Composition per liter:

Pancreatic digest of casein	11.0g
Agar	8.0g
Buffer salts	3.3g
Peptone	3.0g
NaCl	3.0g
Glucose	2.0g
Starch	1.0g

Nucleoside bases 0.02g
Thiamine 0.02mg
pH 7.4 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Oxoid Unipath.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the performance of antibiotic sensitivity assays.

Soil Extract Agar

Composition per liter:
Soil 500.0g
Agar 15.0g
Glucose 2.0g
Yeast extract 1.0g
KH_2PO_4 ..... 0.5g

Preparation of Medium: Add 500.0g of garden soil to 1.0L of tap water. Autoclave for 3 h at 15 psi pressure–121°C. Filter through Whatman #2 filter paper. Add remaining components to filtrate. Bring volume to 1.0L with tap water. Gently heat and bring to boiling. Distribute into tubes in 7.0mL volumes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation and identification of *Histoplasma capsulatum, Blastomyces dermatitidis*, and *Bacillus* species based on the formation of typical conidia.

Staib Agar

Composition per liter:
Agar 15.0g
Glucose 15.0g
Creatinine 5.0g
KH_2PO_4 ..... 3.0g
Biphenyl 1.0g
Chloramphenicol 0.5g
Guizotia abyssinica seed (niger seed) extract 1000.0mL
pH 6.7 ± 0.2 at 25°C

Preparation of Medium: Prepare seed extract by grinding 50.0g of *Guizotia abyssinica* seed in 1.0L of distilled/deionized water. Boil for 30 min. Filter through cheesecloth and filter paper. Add remaining components to seed filtrate. Mix thoroughly and heat with frequent agitation until boiling. Distribute into flasks or tubes. Autoclave for 25 min at 15 psi pressure–110°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the selective isolation and differentiation of *Cryptococcus neoformans* from other *Cryptococcus* species and other yeasts.

TOC Agar
(Tween™ 80 Oxgall Caffeic Acid Agar)

Composition per liter:
Agar 20.0g
Oxgall 10.0g
Caffeic acid 0.3g
Tween™ 80 ..... 10.0mL

Source: This medium is available as a prepared medium from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation and identification of *Candida albicans* and *Cryptococcus neoformans. Cryptococcus albicans* produces germ tubes and chlamydospores when grown on this medium. *Cryptococcus neoformans* appears as tan to brown colonies.

Tomato Juice Agar
(Tomato Juice Yeast Extract Medium)

Composition per liter:
Skim milk 100.0g
Yeast extract 5.0g
Tomato juice, filtered 100.0mL

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of yeasts and fungi. To promote ascospore formation for the identification of yeasts and fungi.

Trichophyton Agar 1

Composition per liter:
Glucose 40.0g
Agar 15.0g
Vitamin assay casamino acids 2.5g
KH_2PO_4 ..... 1.8g
$MgSO_4 \cdot 7H_2O$ 0.1g
pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton Agar 2

Composition per liter:

Glucose	40.0g
Agar	15.0g
Vitamin assay casamino acids	2.5g
KH_2PO_4	1.8g
$MgSO_4 \cdot 7H_2O$	0.1g
Inositol	50.0mg

pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton Agar 3

Composition per liter:

Glucose	40.0g
Agar	15.0g
Vitamin assay casamino acids	2.5g
KH_2PO_4	1.8g
$MgSO_4 \cdot 7H_2O$	0.1g
Inositol	0.05g
Thiamine·HCl	0.2mg

pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton Agar 4

Composition per liter:

Glucose	40.0g
Agar	15.0g
Vitamin assay casamino acids	2.5g
KH_2PO_4	1.8g
$MgSO_4 \cdot 7H_2O$	0.1g
Thiamine·HCl USP	200.0µg

pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton Agar 5

Composition per liter:

Glucose	40.0g
Agar	15.0g
Vitamin assay casamino acids	2.5g
KH_2PO_4	1.8g
$MgSO_4 \cdot 7H_2O$	0.1g
Nicotinic acid	2.0mg

pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton Agar 6

Composition per liter:

Glucose	40.0g
Agar	15.0g
KH_2PO_4	1.8g

NH_4NO_3 .....1.5g
$MgSO_4 \cdot 7H_2O$ 0.1g
pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton Agar 7

Composition per liter:
Glucose 40.0g
Agar 15.0g
KH_2PO_4 .....1.8g
Ammonium nitrate 1.5g
$MgSO_4 \cdot 7H_2O$ 0.1g
Histidine·HCl 0.03g
pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton HiVeg Agar 1

Composition per liter:
Glucose 40.0g
Agar 15.0g
Vitamin-free casein enzymic hydrolysate 2.5g
KH_2PO_4 .....1.8g
$MgSO_4$ 0.1g
pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton HiVeg Agar 2

Composition per liter:
Glucose 40.0g
Agar 15.0g
Vitamin-free plant hydrolysate 2.5g
KH_2PO_4 .....1.8g
$MgSO_4$ 0.1g
Inositol 5.0mg
pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton HiVeg Agar 3

Composition per liter:
Glucose 40.0g
Agar 15.0g
Vitamin-free plant hydrolysate 2.5g
KH_2PO_4 .....1.8g
$MgSO_4$ 0.1g
Inositol 5.0mg
Thiamine 5.0mg
pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from HiMedia.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton HiVeg Agar 4

Composition per liter:
Glucose 40.0g
Agar 15.0g
KH_2PO_4 .....1.8g
$MgSO_4$ 0.1g

Vitamin-free plant hydrolysate 2.5g
Thiamine hydrochloride.....0.2mg
pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from Hi-Media.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Trichophyton HiVeg Agar 5

Composition per liter:
Glucose 40.0g
Agar 15.0g
Vitamin-free plant hydrolysate 2.5g
KH_2PO_4.....1.8g
$MgSO_4$ 0.1g
Nicotinic acid.....0.02g
pH 6.8 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes. Autoclave for 15 min at 15 psi pressure–121°C. Allow tubes to cool in a slanted position.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the differentiation of the *Trichophyton* species.

Tween™ 60-Esculin Agar

Composition per liter:
Agar 15.0g
Peptone.....10.0g
Glucose 10.0g
Yeast extract.....2.0g
Esculin 1.0g
Ferric ammonium citrate.....0.05g
Tween™ 60 ..... 5.0mL
pH 6.0 ± 0.2 at 25°C

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of *Malassezia* species.

V-8 Agar

Composition per liter:
Agar 15.0g
$CaCO_3$.....2.0g
V-8 canned vegetable juice 200.0mL

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation of numerous yeasts and filamentous fungi.

Water Agar
(Tap Water Agar)

Composition per liter:
Agar 15.0g
Tap water 1.0L

Preparation of Medium: Add agar to 1.0L of tap water. Mix thoroughly. Gently heat and bring to boiling. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the cultivation and differentiation of fungi and aerobic actinomycetes based on filament and aerial hyphae morphology.

Yeast Carbon Base, 10X
(Wickerham Carbon Base Broth)
(Assimilation Broth for Yeasts--Nitrogen)

Composition per liter:
Glucose 10.0g
KH_2PO_4.....1.0g
$MgSO_4 \cdot 7H_2O$ 0.5g
NaCl.....0.1g
$CaCl_2 \cdot 2H_2O$ 0.1g
DL-Methionine.....0.02g
DL-Tryptophan.....0.02g
L-Histidine·HCl 0.01g
Inositol 2.0mg
H_3BO_3 .....0.5mg
$ZnSO_4 \cdot 7H_2O$ 0.4mg
$MnSO_4 \cdot 4H_2O$ 0.4mg
Thiamine·HCl 0.4mg
Pyridoxine.....0.4mg

Niacin 0.4mg
Calcium pantothenate 0.4mg
p-Aminobenzoic acid 0.2mg
Riboflavin 0.2mg
$FeCl_3$ 0.2mg
$Na_2MoO_4 \cdot 4H_2O$ 0.2mg
KI 0.1mg
$CuSO_4 \cdot 5H_2O$ 0.04mg
Folic Acid 2.0µg
Biotin 2.0µg

pH 5.5 ± 0.2 at 25°C

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Filter sterilize.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: Used as a base to which different nitrogen sources may be added. For the cultivation and differentiation of bacteria based on their ability to utilize diverse added nitrogen sources.

Yeast Extract Agar

Composition per liter:

Agar 20.0g
Yeast extract 1.0g
Buffer solution 2.0mL

pH 6.0 ± 0.2 at 25°C

Buffer Solution:

Composition per 400.0mL:

KH_2PO_4 ..... 60.0g
Na_2HPO_4 ..... 40.0g

Preparation of Buffer Solution: Add 40.0g of Na_2HPO_4 to 300.0mL of distilled/deionized water. Mix thoroughly. Add 60.0g of KH_2PO_4. Mix thoroughly. Adjust pH to 6.0.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the identification of *Histoplasma capsulatum*, *Blastomyces dermatitidis*, and *Coccidioides immitis*.

Yeast Extract Phosphate Agar (YEP Agar)

Composition per liter:

Agar 20.0g
Yeast extract 1.0g
KH_2PO_4 ..... 0.3g
Na_2HPO_4 ..... 0.2g
Phenol Red 1.0mg

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation of dimorphic pathogenic fungi from clinical specimens.

Yeast Extract Phosphate Agar with Ammonia (YEP Agar with Ammonia) (Smith's Agar)

Composition per liter:

Agar 20.0g
Yeast extract 1.0g
KH_2PO_4 ..... 0.3g
Na_2HPO_4 ..... 0.2g
Phenol Red 1.0mg
NH_4OH (58%) ..... 1 drop per plate

Source: This medium is available as a premixed powder from BD Diagnostic Systems.

Preparation of Medium: Add components to distilled/deionized water and bring volume to 1.0L. Mix thoroughly. Gently heat and bring to boiling. Distribute into tubes or flasks. Autoclave for 15 min at 15 psi pressure–121°C. Pour into sterile Petri dishes or leave in tubes. Add 1 drop of ammonium hydroxide to each plate.

Storage/Shelf Life: Store dehydrated media in the dark in a sealed container below 30°C. Prepared media should be stored under refrigeration (2-8°C). Media should be used within 60 days of preparation. Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration) or contamination, or if the expiration date supplied by the manufacturer has passed.

Use: For the isolation of dimorphic pathogenic fungi from clinical specimens. For the primary recovery of *Blastomyces dermatitidis* and *Histoplasma capsulatum* from contaminated specimens. The medium is designed to be used with ammonium hydroxide, a selective agent that improves the recovery of dimorphic pathogens by inhibiting bacteria, yeasts, and saprophytic fungi.