

YM-11 AGAR (6904)

Intended Use

YM-11 Agar is used for the selective enumeration of yeasts and molds using the ISO-GRID[®] and/or NEO-GRID[™] Membrane Filtration System.

Product Summary and Explanation

YM-11 Agar was formulated to stimulate rapid growth and colonial development of a wide range of fungi. Peptone sources were selected to maximize growth in this medium. YM-11 Agar is buffered at a neutral pH, and selective agents were included to inhibit bacterial growth.

YM-11 Agar is recommended for the rapid enumeration of yeasts and molds in all foods using the ISO-GRID and/or NEO-GRID Membrane Filtration System method.^{1,2}

Principles of the Procedure

Enzymatic Digest of Soybean Meal and Enzymatic Digest of Casein are the nitrogen and vitamin sources in YM-11 Agar. Dextrose is the fermentable carbohydrate. Sodium Chloride maintains the osmotic balance. Potassium Phosphate, Dibasic is a buffering agent. Trypan Blue is a nontoxic dye, staining yeasts and molds colonies blue to enhance their visibility.³ Chloramphenicol and Chlortetracycline-HCl are selective agents used to inhibit bacterial growth. Agar is the solidifying agent.

Formula / Liter

Enzymatic Digest of Soybean Meal	20 g
Enzymatic Digest of Casein	20 g
Dextrose.....	5 g
Sodium Chloride	5 g
Potassium Phosphate, Dibasic	2.4 g
Trypan Blue.....	0.03 g
Chloramphenicol.....	0.1 g
Agar	15 g

Final pH: 7.0 ± 0.2 at 25°C

Formula may be adjusted and/or supplemented as required to meet performance specifications.

Presterilized Antibiotic Supplement, Chlortetracycline-HCl, 20 mL (6912E)

To reconstitute, aseptically add 100 mL sterile distilled water to a bottle containing 0.5 g pre-sterilized powder and shake to dissolve. Store Chlortetracycline solution at 2 - 8°C for up to 60 days.

Precautions

1. For Laboratory Use.
2. TOXIC. Toxic by inhalation and if swallowed. Irritating to eyes, respiratory system, and skin. May cause cancer.

Directions

1. Suspend 67.5 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.
4. Cool to 45 - 50°C. Aseptically add 20 mL of a 0.5 A% (wt/v) aqueous solution of Chlortetracycline HCl. Mix thoroughly.
5. Check pH and adjust, if necessary to obtain a final pH of 7.0 ± 0.2 in the solidified medium.
6. Dispense 18 - 20 mL volumes into Petri dishes, cool until plates are solidified.

Quality Control Specifications

Dehydrated Appearance: Powder is homogeneous, free flowing, and tan.

Prepared Appearance: Prepared medium is clear to trace hazy and dark blue-gray.

