

POTATO DEXTROSE AGAR w/ LECITHIN & TWEEN 80 (7575)

Intended Use

Potato Dextrose Agar w/ Lecithin & Tween 80 is used for the isolation of fungi from surfaces sanitized with quaternary ammonium compounds.

Product Summary and Explanation

Potato Dextrose Agar is a general purpose medium for yeasts and molds that can be supplemented with acid or antibiotics to inhibit bacterial growth. The nutritionally rich base (potato infusion) encourages mold sporulation and pigment production in some dermatophytes.¹ Potato Dextrose Agar w/ Lecithin & Tween 80 is a modification of Potato Dextrose Agar. The addition of Lecithin and Tween 80 to Potato Dextrose Agar is used to neutralize antiseptics and disinfectants for environmental monitoring and other applications.² Complete neutralization of disinfectants is important. Disinfectant carryover can cause a false no-growth test result.

Principles of the Procedure

Potato Infusion provides nitrogen and vitamin sources required for organism growth. Dextrose is included as a carbon source. Lecithin neutralizes quaternary ammonium compounds and ethanol, and Tween 80 neutralizes phenols, hexachlorophene, and formalin. Agar is the solidifying agent.

Formula / Liter

Potato Infusion (dehydrated).....	4 g
Dextrose.....	20 g
Tween 80	5 g
Lecithin.....	0.7 g
Agar	15 g

Final pH: 5.6 ± 0.2 at 25°C

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

Precaution

1. For Laboratory Use.

Directions

1. Suspend 44.7 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.

Quality Control Specifications

Dehydrated Appearance: Powder is homogeneous, lumpy, and light yellow beige.

Prepared Appearance: Prepared medium is hazy and pale to light beige.

Expected Cultural Response: Cultural response on Potato Dextrose Agar w/ Lecithin & Tween 80 at 25 - 30°C after 2 - 7 days incubation.

Microorganism	Response
<i>Aspergillus niger</i> ATCC® 16404	growth
<i>Bacillus subtilis</i> ATCC® 9372	partial inhibition
<i>Candida albicans</i> ATCC® 10231	partial inhibition
<i>Escherichia coli</i> ATCC® 25922	growth
<i>Pseudomonas aeruginosa</i> ATCC® 27853	partial inhibition
<i>Penicillium roquefortii</i> ATCC® 10110	growth
<i>Salmonella typhimurium</i> ATCC® 19430	partial inhibition

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

Consult appropriate references for recommended test procedures.

Results

Yeasts grow creamy to white colonies. Molds will grow as fuzzy colonies of various colors. Count the number of colonies and consider the dilution factor (if test sample was diluted) in determining the yeast and/or mold counts per gram or milliliter of material.

Storage

Store sealed bottle containing the dehydrated medium at 2 - 8°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

Expiration

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitation of the Procedure

Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.

Packaging

Potato Dextrose Agar w/ Lecithin & Tween 80	Code No.	7575A	500 g
		7575B	2 kg
		7575C	10 kg

References

1. **Sabouraud, R.** 1892. Ann. Dermatol. Syphilol. **3**:1061.
2. **Jarrett, L., and A. C. Sonnenwirth (eds.).** 1980. Gradwohl's and parasitic infections, 7th ed. American Public Health Association, Washington, D.C.
3. **Curry, A. S., J. G. Graf, and G. N. McEwen, Jr. (eds.).** 1993. CTFA Microbiology Guidelines. The Cosmetic, Toiletry and Fragrance Association, Washington, D.C.

Technical Information

Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (410)780-5120 or fax us at (410)780-5470.