

## SABOURAUD DEXTROSE AGAR W/ LECITHIN & TWEEN 80 (7392)

### Intended Use

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

### Product Summary and Explanation

Sabouraud Dextrose Agar (SDA) is a modification of Dextrose Agar described by Sabouraud.<sup>1</sup> SDA is used for cultivating pathogenic and commensal fungi and yeasts. The high dextrose concentration and acidic pH of the formula permits selectivity of fungi.<sup>2</sup> The addition of Lecithin and Tween 80 to Sabouraud Dextrose Agar is used to neutralize antiseptics and disinfectants for environmental monitoring and other applications.<sup>3</sup> Complete neutralization of disinfectants is important. Disinfectant carryover can cause false no-growth test results.

### Principles of the Procedure

Enzymatic Digest of Casein and Enzymatic Digest of Animal Tissue provide nitrogen and vitamin sources required for organism growth. Dextrose is included as an energy source. Lecithin neutralizes quaternary ammonium compounds and ethanol and Tween 80 neutralizes phenols, hexachlorophene and formalin. Agar is the solidifying agent.

### Formula / Liter

Enzymatic Digest of Casein .....	5 g
Enzymatic Digest of Animal Tissue.....	5 g
Dextrose.....	40 g
Lecithin.....	0.7 g
Tween 80 .....	5 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 71 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. DO NOT OVERHEAT.
4. After cooling to 45 - 50°C aseptically pour approximately 17 mL into 65 x 15 mm plates to give a meniscus of agar which extends above the top of the plate.

### Quality Control Specifications

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

**Prepared Appearance:** Prepared medium is trace to slightly hazy, and pale yellowish white in color.

**Expected Cultural Response:** Cultural response on Sabouraud Dextrose Agar W/ Lecithin & Tween 80 incubated aerobically at 25 - 30°C and examined for growth after 2 - 7 days.

Microorganism	Approx. Inoculum (CFU)	Expected Results
<i>Aspergillus niger</i> ATCC® 16404	Point Inoculation	Growth
<i>Candida albicans</i> ATCC® 10231	10 - 300	Growth
<i>Penicillium roquefortii</i> ATCC® 10110	Point Inoculation	Growth

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 fuzzy colonies of various colors. Count the number of colonies and consider the dilution factor (if the 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 homogeneous or 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**

<b>Sabouraud Dextrose Agar W/ Lecithin &amp; Tween 80</b>	<b>Code No.</b>	<b>7392A</b>	<b>500 g</b>
		<b>7392B</b>	<b>2 kg</b>
		<b>7392C</b>	<b>10 kg</b>

### **References**

1. **Sabouraud, R.** 1892. Ann. Dermatol. Syphilol. **3**:1061.
2. **Jarrett, L., and A. C. Sonnenwirth (eds.)**. 1980. Gradwohl's and parasitic infections, 7<sup>th</sup> 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 (517)372-9200 or fax us at (517)372-2006.