

Special Yeast and Mold Medium

Intended Use

Special Yeast and Mold Medium is used for isolating and cultivating yeasts and molds.

Summary and Explanation

In 1986, the American Congress of Governmental Industrial Hygienists (ACGIH) described a medium for detecting and enumerating fungi.¹ The ACGIH recommendations were accepted, with the addition of antibiotics, by the Finnish Medical Board which recommends this medium for collecting airborne microorganisms.²

Principles of the Procedure

Special Yeast and Mold Medium is a nutritionally rich medium that supports the growth of a wide variety of yeasts and molds. The medium contains malt extract, peptone and dextrose as sources of nutrients. Streptomycin and/or chlor-tetracycline may be added as antibacterial agents.²

Formula

Difco™ Special Yeast and Mold Medium

Approximate Formula* Per Liter

Malt Extract	20.0	g
Peptone	1.0	g
Dextrose	20.0	g
Agar	20.0	g

*Adjusted and/or supplemented as required to meet performance criteria.

User Quality Control

Identity Specifications

Difco™ Special Yeast and Mold Medium

Dehydrated Appearance: Light beige, free-flowing, homogeneous.

Solution: 6.1% solution, soluble in purified water upon boiling. Solution is light to medium amber, very slightly to slightly opalescent.

Prepared Appearance: Light to medium amber, very slightly to slightly opalescent.

Reaction of 6.1%
Solution at 25°C: pH 5.6 ± 0.2

Cultural Response

Difco™ Special Yeast and Mold Medium

Prepare the medium per label directions. Inoculate and incubate at 30 ± 2°C for 7 days for the yeast and molds. Inoculate and incubate other organisms at 35 ± 2°C for 48 hours.

ORGANISM	ATCC™	INOCULUM CFU	RECOVERY
<i>Aspergillus brasiliensis (niger)</i>	16404	30-300	Good
<i>Candida albicans</i>	26790	30-300	Good
<i>Enterococcus faecalis</i>	29212	30-300	Marked to complete inhibition
<i>Escherichia coli</i>	25922	30-300	Marked to complete inhibition
<i>Trichophyton mentagrophytes</i>	9533	30-300	Poor to fair

Directions for Preparation from Dehydrated Product

1. Suspend 61 g of the powder in 1 L of purified water. Mix thoroughly.
2. Heat with frequent agitation and boil for 1 minute to completely dissolve the powder.
3. Autoclave at 121°C for 15 minutes. Cool to 45-50°C.
4. For improved selectivity, aseptically add 40 mg streptomycin and/or 35 mg chlortetracycline and mix well.
5. If desired, adjust pH by aseptically adding 1N HCl or 1N NaOH.
6. Test samples of the finished product for performance using stable, typical control cultures.

Procedure

Use standard procedures to obtain isolated colonies from specimens. Incubate plates aerobically at room temperature in the dark for 4-7 days. Examine plates for growth after 18-24 hours incubation and up to 7 days.

Expected Results

Yeasts and molds should show growth in 4-7 days at room temperature. Bacteria should be inhibited on the complete medium containing antibacterial agents.

References

1. Morey, Otten, Burge, Chatigny, Feeley, LaForce and Peterson. 1986. Applied Industrial Hygiene 1:R-19.
2. Guide regarding condition and attendance of houses. 1990. Finnish Medical Board. Helsinki, Finland.

Availability

Difco™ Special Yeast and Mold Medium

Cat. No. 210810 Dehydrated – 500 g