

Sabouraud Dextrose Broth EP/USP

Cat. 1205

For the cultivation of yeasts and molds.

Practical information

Applications

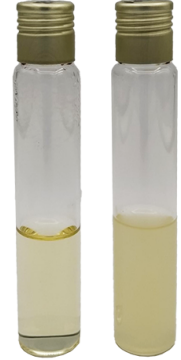
Selective enrichment

Categories

Yeasts and molds

Industry: Pharmaceutical/Veterinary / Clinical / Food / Quality Control

Regulations: USP / European Pharmacopoeia



Principles and uses

Sabouraud Dextrose Broth is a liquid medium used for culturing yeasts, molds and aciduric microorganisms. The high dextrose concentration and acidic pH make this medium selective for fungi from clinical samples and other materials.

This medium is a modification of the Dextrose Agar described by Sabouraud, with half the Dextrose and without the agar. It is used for cultivating molds, yeasts and pathogenic fungi, particularly those associated with skin infections. It is also used in tests for sterility.

The formula is based on the European Pharmacopoeia. Dextrose is the fermentable carbohydrate providing carbon and energy. Peptone mixture provides nitrogen, vitamins, minerals and amino acids essential for growth. The high dextrose concentration and acidic pH make this medium selective for fungi.

The European Pharmacopoeia, USP recommends this medium in the paragraph 2.6.13: "Microbiological examination of non-Sterile products: test for specified microorganisms for *Candida albicans*" for the testing of *Candida albicans* in products. In the paragraph 2.6.12: "Microbiological examination of non – sterile products: Microbial enumeration test" for the preparation of test strains of *Candida albicans* in the examination of TYMC.

Formula in g/L

Dextrose	20	Mixture of peptic digest of animal tissue and pancreatic digest of casein (1:1)	10
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Preparation

Suspend 30 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 118-121 °C for 15 minutes. DO NOT OVERHEAT.

Instructions for use

- » For clinical diagnosis, the type of samples are all kind of samples (hair, skin, nails, etc).
- Inoculate the tubes with the test microorganism.
- Incubate at 35±2 °C for 3-5 days.
- Reading and interpretation of the results.

» For other uses not covered by the CE marking:

Test of specified microorganisms (*Candida albicans*) according to European Pharmacopoeia:

- Prepare the product to be examined using 10 ml or the quantity corresponding to not less than 1 g o 1 ml to inoculate 100 ml of Sabouraud Dextrose Broth and to mix it carefully.
- Incubate at 30-35 °C for 3-5 days.
- Subculture on a plate of Sabouraud Dextrose Agar (Cat. 1024) and incubate at 30-35 °C for 24-48 hours.

- Growth of white colonies may indicate the presence of *C.albicans*.
- The product complies with the test if such colonies are not present or if the confirmatory identification tests are negative.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
Sin restos	Polvo fino	Beige	Ámbar	5,6 ± 0,2

Microbiological test

According to European Pharmacopoeia, *Candida albicans*:
Incubation conditions: (30-35 °C /3-5 days)

Rest of strains:
Incubation conditions: (30±2 °C / 18-48 h)

Microorganisms	Specification
<i>Candida albicans</i> ATCC 10231	Good growth, turbidity
<i>Aspergillus brasiliensis</i> ATCC 16404	Good growth, turbidity
<i>Candida albicans</i> ATCC 2091	Good growth, turbidity
<i>Escherichia coli</i> ATCC 25922	Partially inhibited
<i>Escherichia coli</i> ATCC 8739	Partially inhibited
<i>Lactobacillus rhamnosus</i> ATCC 9595	Good growth, turbidez
<i>Saccharomyces cerevisiae</i> ATCC 9763	Good growth, turbidity

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

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Jarett, L., and A.C. Sonnenwirth (ed) 1980. Gradwohl's clinical laboratory methods and diagnosis, 8th ed. CV Mosby
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European Pharmacopoeia. 7.0