

SABOURAUD DEXTROSE BROTH EUROPEAN PHARMACOPOEIA

CAT N°: 1205

For the cultivation of yeasts and molds

FORMULA IN g/l

Dextrose	20.00	Mixture of Peptic of Animal Tissue and Pancreatic Digest of Casein(1:1)	10.00
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Final pH 5.6 ± 0.2 at 25°C

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 OVEARHEAT. The prepared medium should be stored at 2-8°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

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.

Inoculate and incubate at 30°C for 18-48 hours.

The European Pharmacopoeia recommends in the Paragraph 2.6.13 " Microbiological examination of non-sterile products: test for specified microorganisms for *Candida albicans*" to prepare the product to be examined using 10 ml of the quantity corresponding to not less than 1g or 1ml 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 and incubate at 30-35°C for 24-48 hours.

This medium is also recommended by European Pharmacopoeia in the Paragraph 2.6.12 " Microbiological examination of non sterile products: Microbial enumeration test" for the preparation of test strains of *Candida albicans*. Inoculate and incubate at 20-25°C for 2-3 days.

MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 30±2°C and observed after 18-48 hours.

Microorganisms	Growth
<i>Aspergillus brasiliensis</i> ATCC 16404	Good
<i>Candida albicans</i> ATCC 26790	Good

* <i>Candida albicans</i> ATCC 10231	Good
<i>Escherichia coli</i> ATCC 25922	Partially inhibited
<i>Escherichia coli</i> ATCC 8739	Partially inhibited
<i>Lactobacillus casei</i> ATCC 9595	Good
<i>Saccharomyces cerevisiae</i> ATCC 9763	Good

* According to European Pharmacopeia. For preparation of test strains, incubate at 20-25°C for 2-3 days and for specified microorganisms at 30-35°C for 3-5 days.

BIBLIOGRAPHY

Sabouraud, R. 1892. Ann. Dermatol. Syphilol. 3:1061

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

Davidson, A.M., E.S Dowding, and A.H.R Buller. 1932 Hyphal fusions in dermatophytes. Can J. Res. 6:1.

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European Pharmacopoeia. 7.0



STORAGE

Once opened keep powdered medium closed to avoid hydration.

