

FT-A2WUT0

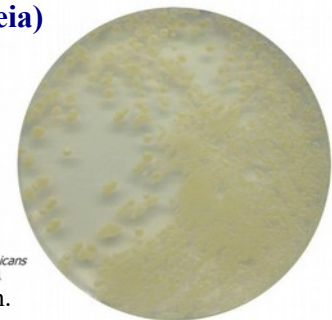


## Sabouraud Dextrose Agar

*European Pharmacopoeia – For cultivation of yeast and molds*

### Product Description

<b>Name :</b>	<b>Sabouraud Dextrose Agar (European Pharmacopoeia)</b>		
<b>Catalog Number :</b>	A2WUT0, 500 g		
<b>Formula in g/l :</b>	Dextrose	40.00	
	Bacterial Agar	15.00	
	Mixture of peptic Digest of Animal Tissue and Pancreatic Digest of Casein (1:1)	10.00	
<b>Final pH:</b>	<b>5,6 ± 0,2 at 25°C</b>		



**Storage:** 2-25°C. Once opened keep powdered medium closed to avoid hydration.

### Directions for use

#### Preparation

Suspend 65 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. Distribute and sterilize in autoclave at 118-121°C for 15 minutes. AVOID OVERHEATING as it facilitates the hydrolysis of the components and the medium remains soft. The prepared medium should be stored at 8-15°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.

#### Use

SABOURAUD DEXTROSE AGAR can be used for cultivating yeasts, molds and aciduric microorganisms. It is used for cultivating pathogenic fungi, particularly those associated with skin infections. This medium is also used for determining the microbial and fungal content of cosmetics and for the mycological evaluation of food.

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. Bacteriological agar is the solidifying agent. The high dextrose concentration and acidic pH make this medium selective for fungi.

Georg et al. demonstrated that the basic agar fortified by three antibiotics considerably improves the isolation of pathogenic fungi from heavily contaminated sources. To prepare a selective culture medium aseptically add the following for every liter of medium before use: 0.4 g Cycloheximide; 20 units Penicillin; 40 mg Streptomycin.

One can obtain a very rich Sabouraud medium by dissolving the medium in one liter of Heart Infusion (Cat. 1714).

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The European Pharmacopoeia recommends this medium in the Paragraph 2.6.12 Microbiological examination of non-sterile products: Microbial enumeration test. for promoting the growth of *Candida albicans* ATCC 10231 and *Aspergillus brasiliensis* ATCC 16404 to inoculate  $\leq 100$  CFU at 20-25°C for  $\leq 5$  days.

The European Pharmacopoeia recommends in the Paragraph 2.6.13 “Microbiological examination of non – sterile products”

### Test for specified microorganisms

Use Dextrose Sabouraud Agar for growth promotion. After incubation at 30-35°C for 3-5 days in Dextrose Sabouraud Broth subculture on the plate of Dextrose Sabouraud Agar and incubate at 30-35°C for 24-48 hours.

### Interpretation

Growth of white colonies may indicate the presence of *Candida albicans*. This is confirmed by identification tests. The product complies with the test if such colonies are not present or if the confirmatory identification tests are negative.

## Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 30°C and observed after 3-7 days.

Microorganisms	Inoculum cfu / ml	Growth	Recovery Rate (%)
** <i>Aspergillus brasiliensis</i> ATCC 16404	$\leq 100$	Good	$\geq 70$
* <i>Candida albicans</i> ATCC 10231	$\leq 100$	Good	$\geq 70$
<i>Escherichia coli</i> ATCC 25922	$\leq 100$	Moderate-Good	$\geq 70$
<i>Escherichia coli</i> ATCC 8739	$\leq 100$	Moderate-Good	$\geq 70$
<i>Lactobacillus casei</i> ATCC 9595	$\leq 100$	Good	$\geq 70$
<i>Saccharomyces cerevisiae</i> ATCC 9763	$\leq 100$	Good	$\geq 70$

According European Pharmacopoeia 7.0

\* Incubate at 30-35°C for 24-48 hours. Total count  $\leq 100$  cfu/ml to incubate at 20-25°C for  $\leq 5$  days

\*\* Total count  $\leq 100$  cfu/ml to incubate at 20-25°C for  $\leq 5$  days

## References

- Sabouraud, Ann. Dermat and Syphilol 1892-3. Gerog J. Lab. CLin. Med. 67;355 1953
- Murray, P.R., E.J baron, M.A. Pfaller, E.C. Tenover, and R.H. YOLKEN (ed.) 1995. Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C
- Beuchat, L.R., J.E Corry, A.D King, Jr. and J.I Pitt (ed) 1986 Methods for the mycological examination of food. Plenum Pres, New York European Pharmacopoeia. 7.0

## Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.

Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : Uptima / Interchim; Hotline : +33(0)4 70 03 73 06

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