

TECHNICAL DATA SHEET

Sabouraud Dextrose Agar

Principle

Sabouraud dextrose agar is used for cultivation of yeasts, molds and aciduric bacteria. It is also recommended by USP, IP, JP and EP as a medium for microbial limit testing of pharmaceutical products and raw material used in pharmaceutical industries. The medium is prepared in accordance with the harmonized principles of USP/EP/IP/JP. Medium is consisting of meat and casein peptone (1:1), dextrose monohydrate and agar. The meat and casein peptone provide carbonaceous, nitrogenous compounds, long chain amino acids, vitamins and other essential growth nutrients in addition to that the dextrose monohydrate serves as energy source. The high concentration of dextrose and low pH of medium favor the growth of yeasts and molds and inhibit other contaminating bacteria from pharmaceutical and clinical specimens. Agar is used as solidifying agent.

Use: For the cultivation of yeasts, molds and aciduric microorganisms

Contents*

Ingredients	Gram/Litre
Meat and Casein Peptone	10.000
Dextrose Monohydrate	40.000
Agar	15.00
pH at 25°C	5.6 ±0.2

*** Formula adjusted for optimum performance and parameters**

Directions: Dissolve 65.0 grams in 1000 ml distilled water. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 min, cool it to 42-45 °C and distribute aseptically in to the petri plates and allow to solidify. Ensure complete solidification and inoculate test sample aseptically. As per IP and EP the media can be fortified with antibiotic like 0.1g of benzylpenicillin sodium and 0.1g of tetracycline per liter as sterile solution or alternatively 50 mg of chloramphenicol per liter of medium before sterilization to achieve more selectivity.

OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com



Specimens' types analyzed

Pharmaceutical samples, clinical samples, etc.

Precautions to be taken

These microbial media are intended for the in-vitro use only. All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation

The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Different Microbial Response

Appearance	Light beige colored, free-flowing, homogeneous powder
Reaction of 6.5% solution	5.6 $\pm$ 0.2 at 25 °C
pH	5.40- 5.80 at 25 °C
Gelling	Firm comparable with 1.5% agar gel
Color and clarity of ready medium	Light to medium amber, very slightly opalescent without significant precipitate
Growth Promotion properties	Best at $\leq$ 100 CFU at 32-37 °C for 18-72 h
Indicative properties	Optimum at $\leq$ 100 CFU at 32-37 °C for 18-48 h
Negative control	Performed using sterile distilled water

Cultural characteristics observed after an incubation at 35 $\pm$ 2°C for 18-48 hours

Organism	ATCC no.	Inoculum	Growth	Recovery	Incubation Temperature	Incubation period
Candida albicans	10231	50-100	Luxurious	$\geq$ 70%	33-37 °C	3 to 5 days
Aspergillus brasiliensis	16404	50-100	Luxurious	$\geq$ 70%	33-37 °C	3 to 5 days
Saccharomyces cerevisiae	9736	50-100	Luxurious	$\geq$ 70%	33-37 °C	3 to 5 days

This document has been produced electronically and it is valid without signature.

www.oxfordlabchem.com

OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com



Storage and Shelf Life: Hygroscopic; keep container tightly closed. Store in cool dry place.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Reference

1. Atlas, R. M. (2005). *Handbook of media for environmental microbiology*. CRC press.
2. *Difco Manual* (1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.
3. *European Pharmacopoeia*, (2011), European Dept. for the quality of Medicines.
4. *Indian Pharmacopoeia*, (2018), Govt. of India, the Controller of Publication, New Delhi
5. Rand, M. C., Arnold E. Greenberg, and Michael J. Taras, (1976), *Standard methods for the examination of water and wastewater*. Prepared and published jointly by American Public Health Association, American Water Works Association, and Water Pollution Control Federation.
6. *The Japanese Pharmacopoeia*, 17th Ed. (2016), The Ministry of Health, Labour And Welfare
7. *The United States Pharmacopoeia*, (2014), The United States Pharmacopeial Convention. 12601 Twinbrook Parkway, Rockville, MD 20852.

Disclaimer:

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Oxford Lab Fine Chem LLP makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Oxford Lab Fine Chem LLP will not be responsible for damages resulting from use of or reliance upon this information.

This document has been produced electronically and it is valid without signature.

www.oxfordlabchem.com