Sabouraud Dextrose Agar

Intended Use
Sabouraud Dextrose Agar is a general-purpose media used for isolation and cultivation of Yeasts, Moulds and Aciduric bacteria.

Summary
Sabouraud Dextrose Agar is Carlier's modification of the formulation described by Sabouraud for the cultivation of fungi, particularly those associated with skin infections. It is used in qualitative procedures for cultivation of pathogenic and non-pathogenic fungi, particularly dermatophytes. Sabouraud Dextrose Agar is recommended by the USP/EP/BP/JP in Microbial Limit Tests for performing total yeast and mould count and is included in the Bacteriological Analytical Manual for food testing. It is also recommended by APHA for the examination of foods. Sabouraud Dextrose Agar can be made inhibitory to most pathogenic fungi and bacteria by the addition of antibiotics. Gentamycin is an amino glycoside that inhibits the growth of Gram-negative bacteria. Chloramphenicol is inhibitory to a wide range of Gram-positive and Gram-negative bacteria, cycloheximide is an antifungal agent that inhibits saprophytic fungi while allowing the growth of yeasts or dermatophytes. George *et al.,* aseptically added 0.5 g cycloheximide, 20000 units penicillin and 40000 units streptomycin to each liter of autoclaved, cooled medium. *Cryptococcus neoformans*, *Aspergillus fumigatus* and *Allescheria boydii* were found to be sensitive to cycloheximide; *Actinomyces bovis* and *Nocardia asteroids* were sensitive to penicillin and streptomycin. Hantshke used colistin, novobiocin and cycloheximide to isolate *Candida albicans*. Dolan used Gentamycin, Chloramphenicol and Cycloheximide for the selective isolation of pathogenic fungi.

Principle
Mixture of peptic digest of animal tissue and pancreatic digest of casein (1:1) provides nitrogenous compounds, carbon and other growth factors. Dextrose is the carbohydrate source. The low pH of approximately 5.6 is favourable for the growth of fungi, especially dermatophytes and is slightly inhibitory to contaminating bacteria. Various antibiotics can be added to this medium for bacterial inhibition as well as to make it selective for the isolation of pathogenic fungi from material containing large number of other fungi or bacteria.

Formula*

Ingredients	**g/L**
Dextrose	40.0
Mixture of Peptic Digest of Animal Tissue and Pancreatic Digest of Casein (1:1)	10.0
Agar	15.0
Final pH (at 25°C)	5.6 ± 0.2

*Adjusted to suit performance parameters.

Directions
1. Loosen the cap.
2. Melt the medium completely in a water bath at 100°C. Do not remove the cap of the bottle while melting.
3. Cool to 45°C-50°C, mix well and pour into presterile petriplate.

Quality Control
Appearance: Light amber coloured, slightly opalescent gel.
Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP after an incubation at 20°C-25°C for ≤ 5 days.
Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time.

Organism (ATCC)	**Growth**
Candida albicans 3147 (10231)	Good
Aspergillus brasiliensis WLRI 034(120) (16404)	Good

Note: For good growth - Growth obtained on the test media should not differ by a factor greater than 2 from calculated value for a standardized inoculum.
Inoculum cfu for good growth is 10-100.

Remarks

1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discoloration, drying or other sign of deterioration.
2. Ensure that the temperature of water bath is at 100°C so that the medium melts completely. Cooler water baths give rise to lumpy, uneven medium.
3. Before pouring into sterile petriplates, gently swirl the bottle to check whether the entire contents are properly mixed and melted.
4. Good laboratory practices and hazard precautions must be observed at all times.
5. After use media containers, prepared plates, sample, sample containers and other contaminated materials must be sterilized or incinerated before discarding.

Storage and Stability

1. Store the ready to use Sabouraud Dextrose Agar at 15°C-25°C in a cool, dry place away from light.
2. Stability of the kit is as per expiry date mentioned on the label.

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Carlier G. I. M., 1948, Brit. J. Derm. Syph., 60:61.
2. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
3. The United States Pharmacopoeia, 2011, The United States Pharmacopoeial Convention.,,Rockville, MD.
4. European Pharmacopoeia, 2011, European Dept. for the quality of Medicines.
5. Japanese Pharmacopoeia, 2008.
6. British Pharmacopoeia, 2011, The Stationery Office British Pharmacopoeia.
7. Bacteriological Analytical Manual, 8th Edition, Revision A, 1998. AOAC, Washington D.C.
8. Murray PR, Baren EJ, Jorgensen JH, Pfaller MA, Yolken RH (editors) 2003, Manual of Clinical, Microbiology, 8th ed., ASM, Washington, D.C.
9. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description	Pack Size
203190500100	Bottle Media	100 mL
203190500500	Bottle Media	500 mL

Temperature Limit	Manufacturer	LOT Batch Code	Date of Manufacture
REF Catalogue Number	Consult Instructions for use	Use-by Date	This way up

Revision: 0825/VER-03

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.