Sabouraud Dextrose Agar with Antibiotics (S) (Medium 4) IP

Intended Use
Sabouraud Dextrose Agar Medium with antibiotics is a general-purpose medium for the cultivation of Yeasts, Moulds and Aciduric bacteria in compliance with IP.

Summary
Sabouraud Dextrose Agar Medium with antibiotics is recommended for cultivation of yeasts and moulds by Indian Pharmacopoeia. This medium was described originally by Sabouraud for the cultivation of fungi, particularly useful for the fungi associated with skin infections. The medium is used with antibiotics such as tetracycline and benzylpenicillin for the isolation of pathogenic fungi from materials containing large numbers of fungi or bacteria.

Principle
Peptones provide nitrogenous compounds. Dextrose acts as an energy source. Tetracycline and benzyl penicillin inhibit a wide range of Gram-positive and Gram-negative bacteria which makes the medium selective for fungi. The low pH favors fungal growth and inhibits contaminating bacteria from clinical specimens.

Formula*

Ingredients	g/L
Peptones (Meat and Casein)	10.0
Dextrose Monohydrate	40.0
Agar	15.0
Final pH (at 25°C)	5.6 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen
Clinical samples.

Specimen Collection and Handling
Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 65.00 g of the powder in 1000 mL purified / distilled water.
2. Heat if necessary, to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Add 0.1 g benzylpenicillin sodium and 0.1 g of tetracycline or alternatively add 50 mg of chloramphenicol per liter of medium as sterile solutions.

Quality Control
Dehydrated Appearance: Cream to yellow coloured, homogeneous, coarse free flowing powder.
Prepared Appearance: Light amber coloured, clear to slightly opalescent gel forms in petridishes.
Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP/IP and growth is observed after an incubation at 20°C-25°C for <5 days for fungi.
Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤ 100 cfu of appropriate microorganism at 20°C-25°C.

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

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

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Precautions / Limitations

Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet.

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. Indian Pharmacopoeia 2010, Ministry of Health and Family welfare, Government of India, New Delhi.
2. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
3. Ajello L., 1957, J. Chron. Dis., 5:545.
4. Lorian (Ed.),1980, Antibiotics In Laboratory Medicine, Williams and Wilkins, Baltimore.
5. Murray, P. R 2005, In Manual of Clinical Microbiology, 7th ed., ASM, Washington, D.C.
6. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201190060100	Dehydrated Culture Media	100 g
201190060500	Dehydrated Culture Media	500 g