

Sabouraud Dextrose Agar Plate (Triple Layer Pack, Gamma-Irradiated)

Intended Use

Sabouraud Dextrose Agar Plate is used for cultivation of Yeasts, Moulds and Aciduric microorganisms.

Summary

Sabouraud Dextrose Agar was formulated by Sabouraud in 1892 for culturing dermatophytes, later Carliers modified the formulation and same is used for the cultivation of fungi (yeasts, moulds), particularly useful for the fungi associated with skin infections.

The acidic pH of this medium inhibits the growth of bacteria but permits the growth of yeasts and most filamentous fungi. This medium is also employed to determine mycological evaluation of food, contamination in cosmetics and clinically to aid in the diagnosis of yeast and fungal infections.

Use of contact plate method to control surfaces is recommended in the ISO standards 14698-1, ISO 18598, USP chapter 1116 and in Good Manufacturing practices.

Principle

Gamma Irradiated Sabouraud Dextrose Agar Plates are triple layer packed in stacks of five plates. The presence of an irradiation indicator enables the rapid and easy visual confirmation by the cleanroom operator that the medium is irradiated. Each pack (media and their wrappings) receives an irradiation dose between 23 to 32 kGy to guarantee that no viable contaminants are present.

Sabouraud Dextrose media is comprised of pancreatic digest of casein and peptic digest of animal tissue which provide a nutritious source of amino acids and nitrogenous compounds for the growth of fungi and yeasts. Dextrose is the fermentable carbohydrate incorporated in high concentration as a carbon and energy source. Agar is the solidifying agent.

Formula*

Ingredients	g/L
Pancreatic Digest of Casein	5.0
Peptic Digest of Animal Tissue	5.0
Dextrose	40.0
Agar	15.0

*Adjusted to suit performance parameters.

Additional Material Required

Air Sampler – AccuBas Ax2, Bacteriology Incubator.

Instructions for use

1. Open the sterile pack and remove Sabouraud Dextrose Agar Plate aseptically.
2. Inoculate/streak the plate as per standard procedure.
3. Sampling:
 - I. For settle plate, expose the plates for 4 hours. During exposure, care should be taken for complete exposure of media.
 - II. For dynamic air sampling, use air sampler.
4. Incubate the plates in inverted position as per standard guidelines.

Reading and interpretation

1. After incubation, observe the microbial growth and count the colonies.
2. Interpretation is assured by user.
3. User is responsible to define the action limits as per standard guidelines and alert limits on the basis of trend analysis & other relevant data.

Quality Control

Appearance: Gel with smooth convex surface, without any cracks, bubbles and drying or shrinking of media.

Colour of Medium: Light amber coloured, very slightly opalescent gel in 55 mm plate.

Quantity of Medium: 15.5 ± 1 g in 55 mm plate.

pH at 25°C ± 2°C: 5.6 ± 0.2

Gamma Irradiation: The above said product was Gamma Irradiated between 23 KGy - 32KGy.

Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP and growth is observed 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 specified in the test, inoculating ≤ 100 cfu of appropriate microorganism.

Indicative Properties

The test results observed are within the specified temperature and time, inoculating ≤ 100 cfu of appropriate microorganism.

Growth Promoting + Indicative

Organism (ATCC)	Growth	Colour of Colony	Incubation Temperature	Incubation Period
<i>Candida albicans</i> 3147 (10231)	Good	White	30°C-35°C	24 Hours

Additional Microbiological Testing

<i>Saccharomyces cerevisiae</i> NRRL Y-567 (9763)	Good	White	20°C-25°C	48 Hours
<i>Candida albicans</i> 3147 (10231)	Good	White	20°C-25°C	48 Hours
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good	*	20°C-25°C	72 Hours

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.

Storage and Shelf Life

1. Store between 15°C-25°C to avoid water condensation. Condensation can be prevented by avoiding quick temperature shifts and mechanical stress.
2. Under optimal conditions, the medium has a shelf life of 6 months. Use before expiry mentioned on the label.

Reference

1. Carlier G. I. M., 1948, Brit. J. Derm. Syph., 60:61.
2. ISO 14698-1 (2003). Cleanrooms and associated controlled environments. Biocontamination control. Part 1: General principles and methods.
3. ISO 18593 (2004). Microbiology of food and animal feeding stuffs - Horizontal methods for sampling techniques from surfaces using contact plates and swabs.
4. Sabouraud, R. 1892. Contribution a l'etude de la trichophytie humaine. Etude clinique, microscopique et bacteriologique sur la pluralité des trichophytions de l'homme. Ann. Dermatol. Syphil. 3: 1061-1087.
5. USP Chapter 61: Microbiological Examination of Nonsterile Products: Microbial enumeration Tests.
6. USP Chapter 62: Microbiological Examination of Nonsterile Products: Tests for Specified Microorganism.
7. USP chapter 1116: microbiological evaluation of cleanrooms and other controlled environments.
8. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product	Pack Size
205191030200	Sabouraud Dextrose Agar Plate	200 Plates

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.