



Sabouraud Dextrose Agar

M063

Intended Use:

Recommended for the cultivation of yeasts, moulds and aciduric bacteria from clinical and non clinical samples.

Composition**

| Ingredients | Gms / Litre |
|----------------------|-------------|
| Dextrose (Glucose) | 40.000 |
| Mycological, peptone | 10.000 |
| Agar | 15.000 |
| Final pH (at 25°C) | 5.6±0.2 |

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 65.0 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Sabouraud Dextrose Agar is Carlier's modification (3) of the formulation described by is a modification of Sabouraud Dextrose Agar which is described by Sabouraud (7) for the cultivation of fungi (yeasts, moulds), particularly useful for the fungi associated with skin infections. This medium is also employed to determine microbial contamination in food, cosmetics, and clinical specimens (2).

Mycological Peptone provides nitrogenous compounds. Dextrose provides an energy source. High dextrose concentration and low pH favors fungal growth and inhibits contaminating bacteria from test samples (6).

Type of specimen

Clinical samples: skin scrapings, Food samples ; Cosmetics.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (4,5).

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines(1,4,8). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions:

In Vitro diagnostic use. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. For heavily contaminated samples, the plate must be supplemented with inhibitory agents for inhibiting bacterial growth with lower pH.
2. Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet
3. Further biochemical tests should be carried out for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates.

Reaction

Reaction of 6.5% w/v aqueous solution at 25°C (after sterilization). pH : 5.6±0.2

pH

5.40-5.80

Cultural Response

Growth Promotion was carried out in accordance with the (USP/EP/BP/JP), after an incubation at 20-25 °C for 24-48 hours. Recovery rate is considered as 100% for bacteria growth on Soybean Casein Digest Agar and fungus growth on Sabouraud Dextrose Agar

Growth Promotion Test

Growth Promotion was carried out in accordance with the harmonized method of ICH (USP/EP/BP/JP), after an incubation at 30-35 °C for 24-48 hours. Recovery rate is considered as 100% for bacteria growth on Soybean Casein Digest Agar and fungus growth on Sabouraud Dextrose Agar

Growth Promoting Properties

Growth of microorganism comparable to that previously obtained with previously tested and approved lot of medium occurs at the specified temperature for not more than the shortest period of time specified inoculating ≥ 100 cfu (at 30-35°C for 24 hours).

Indicative properties

Colonies are comparable in appearance and indication reaction to those previously obtained with previously tested and approved lot of medium occurs for the specified temperature for a period of time within the range specified inoculating ≥ 100 cfu (at 30-35°C for 24-48 hours).

| Organism | Inoculum (CFU) | Growth | Recovery |
|---|----------------|----------------------------|-------------|
| <i>Candida albicans</i> ATCC 10231 (00054*) | 50 -100 | Luxuriant (white colonies) | ≥ 70 % |
| # <i>Aspergillus brasiliensis</i> ATCC 16404 (00053*) | 50 -100 | luxuriant | ≥ 70 % |
| <i>Candida albicans</i> ATCC 2091 (00055*) | 50 -100 | luxuriant | ≥ 70 % |
| <i>Saccharomyces cerevisiae</i> ATCC 9763 (00058*) | 50 -100 | luxuriant | ≥ 70 % |
| <i>Escherichia coli</i> ATCC 8739 (00012*) | 50 -100 | luxuriant | ≥ 70 % |
| <i>Escherichia coli</i> ATCC 25922 (00013*) | 50 -100 | luxuriant | ≥ 70 % |
| <i>Escherichia coli</i> NCTC 9002 | 50 -100 | luxuriant | ≥ 70 % |
| <i>Lactobacillus casei</i> ATCC 334 | 50 -100 | luxuriant | ≥ 70 % |
| <i>Trichophyton rubrum</i> ATCC 28191 | | luxuriant | |

Key : (*) - Corresponding WDCM numbers. (#) - Formerly known as *Aspergillus niger*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (4,5).

Reference

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4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
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6. Murray PR, Baren EJ, Jorgensen JH, Pfaller MA, Tenover FC, Tenover BC (editors) 2003, Manual of clinical Microbiology, 8th ed.,ASM, Washington, D.C.
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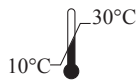
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In vitro diagnostic medical device



CE Marking



Storage temperature



Do not use if package is damaged



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