



## Sabouraud Dextrose Agar, Granulated

GM063

### Intended Use:

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

### Composition\*\*

Ingredients	g / L
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 (1) of the formulation described by is a modification of Sabouraud Dextrose Agar which is described by Sabouraud (2) 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 (3). 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 (4).

### Type of specimen

Food and dairy samples ; Clinical samples: skin scrapings

### Specimen Collection and Handling

For food and dairy samples follow appropriate techniques for handling specimens as per established guidelines (5,6,7). For clinical samples, follow appropriate techniques for sample collection and processing as per guidelines (8,9). After use, contaminated materials must be sterilized by autoclaving before discarding.

### Warning and Precautions:

In Vitro diagnostic use. For professional use only. 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 coloured granular media.

#### Gelling

Firm, comparable with 1.5% Agar gel.

#### Colour and Clarity of prepared medium

Light yellow to 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**

Cultural response was observed after an incubation at 20-25°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 (8,9).

**Reference**

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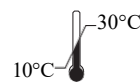
Revision : 05/2024



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