



Dehydrated Culture Media  
Bases / Media Supplements

## Technical Information

### Sabouraud Dextrose Agar

**Product Code: DM 1063**

**Application:** - Yeast Malt Broth (YM Broth) is used for the isolation and cultivation of yeasts, moulds and other acid uric microorganisms.

#### Composition\*\*

Ingredients	Gms / Litre
Dextrose	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

#### Principle & Interpretation

Sabouraud Dextrose Agar is Carliers modification <sup>(1)</sup> of the formulation described by Sabouraud <sup>(2)</sup> for the cultivation of fungi (yeasts, moulds), particularly useful for the fungi associated with skin infections. This medium is also used to determine microbial contamination in food, cosmetics, and clinical specimens <sup>(3)</sup>.

Mycological peptone provides nitrogenous compounds. Dextrose provides an energy source. High dextrose concentration and low pH favours fungal growth and inhibits the growth of contaminating bacteria from test samples <sup>(4)</sup>.

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

#### Methodology

Suspend 65 grams of powder media in 1000 ml distilled water. Shake well & heat to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

#### Quality Control

##### Physical 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

**pH Range** 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 Aga

##### 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.



### Culture Response / Characteristic

**DM 1063:** Culture characteristics, observed after an incubation at 20-25<sup>o</sup>C for 24-48 hour.

Organism	Inoculum (CFU)	Growth	Observed Lot	Recovery
<i>Candida albicans</i> ATCC 10231	50 -100	luxuriant	35 -100	>=70 %
<i>Aspergillus brasiliensis</i> ATCC 16404	50 -100	luxuriant	35 -100	>=70 %
<i>Candida albicans</i> ATCC 2091	50 -100	luxuriant	35 -100	>=70 %
<i>Saccharomyces cerevisiae</i> ATCC 9763	50 -100	Luxuriant	35 -100	>=70 %
<i>Escherichia coli</i> ATCC 25922	50 -100	Luxuriant	35 -100	>=70 %
<i>Escherichia coli</i> ATCC 8739	50 -100	Luxuriant	35 -100	>=70 %
<i>Escherichia coli</i> NCTC 9002	50 -100	Luxuriant	35 -100	>=70 %
<i>Trichophyton rubrum</i> ATCC 28191	50 -100	Luxuriant	35 -100	>=70 %
<i>Lactobacillus casei</i> ATCC 334	50 -100	luxuriant	35 -100	>=70 %

### Storage and Shelf Life

**Dried media:** Store below 30<sup>o</sup>C in tightly closed container and use before expiry date as mentioned on the label.

**Prepared Media:** 2-8<sup>o</sup> in sealable plastic bags for 2-5 days.

### Further Reading

1. Carlier G. I. M., 1948, Brit. J. Derm. Syph., 60:61.
2. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
3. Bacteriological Analytical Manual, 8th Edition, Revision A, 1998. AOAC, Washington D.C.
4. Murray PR, Baren EJ, Jorgensen JH, Pfaller MA, Tenover FC, Tenover FC (editors) 2003, Manual of clinical Microbiology, 8th ed., ASM, Washington, D.C.

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