

Bases / Media Supplements

Technical Information

Sabouraud Dextrose Maltose Broth

Product Code: DM 2460

Application: - Sabouraud Dextrose Maltose Broth is used for the cultivation of moulds, yeasts and aciduric organisms as well as testing antimycotic substances.

Composition**		
Ingredients	Gms / Litre	
Casein enzymic hydrolysate	5.000	
Peptic digest of animal tissue	5.000	
Dextrose	10.000	
Maltose	10.000	
Final pH (at 25°C)	5.4±0.2	
**Formula adjusted, standardized to suit performar	nce parameters	

Principle & Interpretation

Sabouraud Dextrose Agar is Carliers modifications ⁽¹⁾ of the formulation documented by Sabouraud ⁽²⁾ for the cultivation of fungi, mainly associated with skin infections. Sabouraud Dextrose Maltose Broth is used for the cultivation of yeast, moulds and other aciduric organisms ^(3, 4, 5).

Sabouraud dextrose media are peptone media supplemented with dextrose to support the growth of fungi. Casein enzymic hydrolysate and peptic digest of animal tissue provide nitrogen, vitamins, minerals, amino acids and growth factors. Dextrose and maltose provide an energy source for the growth of microorganisms. The low pH favours fungal growth and inhibits contaminating bacteria to grow from clinical specimens ⁽⁶⁾. The acid reaction of the final medium is inhibitory to a large number of bacteria making it solely useful for cultivating fungi and aciduric microorganisms. For isolation of fungi from contaminated specimens, a selective medium should be inoculated simultaneously. Incubate cultures for 4 to 6 weeks before reporting as negative.

Methodology

Suspend 30.0 grams of powder media in 1000 ml. distilled water. Shake well heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. DO NOT OVERHEAT. Mix well and dispense as desired.

Quality Control

Physical Appearance Cream to yellow homogeneous free flowing powder. Colour and Clarity of prepared medium Light amber coloured clear solution in tubes. Reaction Reaction of 3.0% w/v aqueous solution at 25°C. pH: 5.4±0.2.

pH Range 5.20-5.60

Cultural Response/ characteristics DM 2460: Cultural characteristics observed after an incubation at 25-30°C for upto 5 days.





Dehydrated Culture Media Bases / Media Supplements

Organism *Aspergillus brasiliensis ATCC 16404 Candida albi cans ATCC 10231	Inoculum (CFU) 50-100 50-100	Growth Iuxuriant Iuxuriant
Pencillium notatum ATCC 10108	50-100	Luxuriant
Trichophyton mentagrophytes ATCC 9533	50-100	Luxuriant
Trichophyton gallinae ATCC 22243	50-100	Luxuriant
Trichophyton rubrum ATCC 28191	50-100	luxuriant
Trichopyton ajelloi ATCC 24885	50-100	luxuriant
Escherichia coli ATCC 25922	50-100	good- luxuriant (inhibited on media with low pH)
Lactobacillus casei ATCC 9595	50-100	good- luxuriant
Saccharomyces cerevisiae ATCC 9763	50-100	good- luxuriant

*Key: Formerly known as Aspergillus niger

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label. **Prepared Media**: 2-8° in sealable plastic bags for 2-5 days.

Further Reading

1. Carlier G. I. M., 1984, Brit. J. Derm. Syph., 60:61

2. Sabouraud R., 1892, Ann. Dermatol. Syphil. 3 : 1061.

3. Merkblatt 18: Verpackgs- Rdsch, 1974, 25/1: Techn- Wiss. Beilage, 5-8

4. Merkblatt 19: Verpackgs- Rdsch, 1974, 25/6: Techn- Wiss. Beilage, 569-575

5. Merkblatt 21: Verpackgs- Rdsch, 1974, 25/7: Techn- Wiss. Beilage, 53-55

6. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.

Disclaimer:

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