



PRODUCT SPECIFICATION SHEET

Sabouraud Chloramphenicol Agar (DM609)

Intended Use

Sabouraud Chloramphenicol Agar (DM609) is recommended for selective cultivation of yeast and moulds.

Product Summary and Explanation

Sabouraud Chloramphenicol Agar is recommended for the cultivation of fungi, particularly dermatophytes, based on the original formulation of Dextrose Agar described by Sabouraud.⁽¹⁾ The high dextrose concentration and low pH of 5.6 of this medium is favorable for the growth of fungi especially dermatophytes, and slightly inhibitory to contaminating bacteria in clinical specimen.^(2,3) Sabouraud Dextrose Agar is used for determining the microbial content of cosmetics,⁽⁴⁾ and in the mycological evaluation of food.^(5,6) This medium can also be used, clinically to aid in the diagnosis of yeast and fungal infections.^(7,8) The medium is often used with antibiotics such as Chloramphenicol⁽⁹⁾ for the isolation of pathogenic fungi from materials containing large numbers of fungi or bacteria.

Principles of the Procedure

Casein enzymic hydrolysate and peptic digest of animal tissue present in the medium provide nitrogen, vitamins, minerals, amino acids and growth factors. Dextrose provides an energy source for the growth of microorganisms. The low pH of 5.6, favours fungal growth and inhibits contaminating bacteria from clinical specimens. The acid reaction of the final medium is inhibitory to a large number of bacteria making it particularly useful for cultivating fungi and aciduric microorganisms. Chloramphenicol inhibits a wide range of Gram-positive and Gram-negative bacteria which makes the medium selective for fungi.

Formula / Liter

Ingredients	Gms / Liter
Casein enzymic hydrolysate	5.00
Peptic digest of animal tissue	5.00
Dextrose	40.00
Chloramphenicol	0.05
Agar	15.00
Final pH: 5.6 ± 0.2 at 25°C	
Formula may be adjusted and/or supplemented as required to meet performance specifications	

Precautions

1. For Laboratory Use only.
2. IRRITANT. Irritating to eyes, respiratory system, and skin.
3. Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet.

Directions

1. Suspend 65.05 grams of the medium in one liter of distilled water.
2. Heat to boiling, to dissolve the medium completely.
3. Autoclave at 121°C, 15 psi pressure, for 15 minutes / validated cycle.
4. Mix well and pour into sterile petri plates.

Quality Control Specifications

Dehydrated Appearance	Cream to yellow coloured homogeneous free flowing powder
Prepared Medium	Light amber coloured clear to slightly opalescent gel forms in Petri plates
Reaction of 6.5% Solution	pH : 5.6 ± 0.2 at 25°C
Gel Strength	Firm, comparable with 1.5% Agar gel





PRODUCT SPECIFICATION SHEET

Expected Cultural Response: Cultural characteristics observed after an incubation at 20-25°C for 48-72 hours (Incubation for 7 days for Trichophyton species).

Sr. No.	Organisms	Results to be achieved		
		Inoculum (CFU)	Growth	Recovery
1.	<i>Aspergillus brasiliensis</i> ATCC 16404	50 -100	good-luxuriant	--
2.	<i>Candida albicans</i> ATCC 10231	50 -100	good-luxuriant	>=50 %
3.	<i>Escherichia coli</i> ATCC 25922	>=10 ³	inhibited	0 %
4.	<i>Lactobacillus casei</i> ATCC 334	>=10 ³	inhibited	0 %
5.	<i>Saccharomyces cerevisiae</i> ATCC 9763	50-100	good-luxuriant	>=50 %
6.	<i>Trichophyton rubrum</i> ATCC 28191	50 -100	good-luxuriant	--
7.	<i>Escherichia coli</i> NCTC 9002	>=10 ³	inhibited	0 %
8.	<i>Escherichia coli</i> ATCC 8739	>=10 ³	inhibited	0 %

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

1. Refer to appropriate standard references for details on testing protocol to obtain isolated colonies.
2. For isolating fungi from potentially contaminated specimens, a selective medium should be inoculated along with the non-selective medium.
3. Incubate the plates at 25-30°C in an inverted position (agar side up) with increased humidity.
4. All cultures should be examined at least weekly for fungal growth.

Results

1. Count the number of colonies and consider the dilution factor (if test sample was diluted) to determine the yeast and/or mold counts per gram or milliliter of material.
2. Yeasts grow creamy to white colonies. Molds will grow as fuzzy colonies of various colors.
3. Biochemical tests and serological procedures should be performed to confirm findings.

Storage

Store the sealed bottle containing the dehydrated medium at 2 - 8°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light.

Expiration

Refer to the expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedure

1. For identification, organisms must be in pure culture. Morphological, biochemical and/or serological tests should be performed for final identification.
2. Consult appropriate texts for detailed information and recommended procedures.
3. Some fungi may be inhibited by the acidic pH of the medium.
4. Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet.

Packaging

Product Name : Sabouraud Chloramphenicol Agar.

Product Code : DM609

Available Pack sizes : 100gm / 500gm





PRODUCT SPECIFICATION SHEET

References

1. Sabouraud R., 1892, Ann. Dermatol. Syphil. 3 : 1061.
2. Emmons C., Binford C, Uty J. and Kwon-Chung, 1970, Medical Mycology, 2nd Edi, Philadelphia: Lea and febiger.
3. Ajello, George, Kaplan and Kaufman, 1963. CDC laboratory manual for medical mycology. PNS Publication No.994 U.S Government Printing office, Washington, D.C
4. Curry, A. S., J. G. Graf, and G. N. McEwen, Jr. (eds.). 1993. CTFA Microbiology Guidelines. The Cosmetic, Toiletry, and Fragrance Association, Washington, D.C.
5. Marshall, R. T. (ed.). 1993. Standard methods for the microbiological examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
6. www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalyticalmanualBAM/default.htm.
7. Murray, P.R., E. J. Baron, M. A. Pfaller, F. C. Tenover, and R. H. Tenover (eds.). Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C.
8. MacFaddin, J. F. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol.1. Williams & Wilkins, Baltimore, MD.
9. Ajello L., 1957, J. Chron. Dis., 5:545.

Further Information

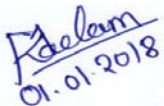
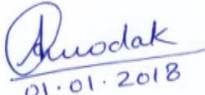

For further information please contact your local MICROMASTER Representative.



MICROMASTER LABORATORIES PRIVATE LIMITED

DM609PSS,QAD/FR/024,Rev.00/01.01.2018

Unit 38/39, Kalpataru Industrial Estate,
Near Runwal Estate, Behind 'R-Mall' ,Ghodbunder Raod,
Thane (W) - 400607. M.S. INDIA.
Ph: +91-22-25895505, 4760, Cell: 9320126789.
Email: micromaster@micromasterlab.com
sales@micromasterlab.com

Prepared By	Checked By	Approved By
 01.01.2018	 01.01.2018	 01.01.2018
Microbiologist	Head Quality Control	Head Quality Assurance

Disclaimer :

All Products conform exclusively to the information contained in this and other related Micromaster Publications. Users must ensure that the product(s) is appropriate for their application, prior to use. The information published in this publication is based on research and development work carried out in our laboratory and is to the best of our knowledge true and accurate. Micromaster Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are intended for laboratory, diagnostic, research or further manufacturing use only and not for human or animal or therapeutic use, unless otherwise specified. Statements included herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.

