



Yeast Dextrose Agar

M1199

Yeast Dextrose Agar is used for the cultivation of a variety of heterotrophic microorganisms.

Composition**

Ingredients	Gms / Litre
Dextrose	10.000
Yeast extract	10.000
Agar	15.000
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 35 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Heterotrophic microorganisms are those that use organic matter synthesized by other organisms for energy and growth. The terminal electron acceptor in the electron transport chain is an organic compound instead of oxygen.

Heterotrophic organisms that feed exclusively on dead organic matters such as rotting wood are called as saprophytes. Heterotrophs that feed on living organic matter such as human tissues are commonly known as parasites. Fungal cells lack chlorophyll and photosynthesis is therefore impossible. Since they consume preformed organic matter, fungi are described as heterotrophic microorganisms. Together with bacteria, fungi decompose vast quantities of dead organic matter. Yeast Dextrose Agar is recommended for isolation and cultivation of various heterotrophic organisms (1). Yeast extract in the medium is the source of nitrogen and growth factors while dextrose provides an energy source for the growth of microorganisms.

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 yellow coloured clear to slightly opalescent gel forms in Petri plates.

Reaction

Reaction of 3.5% w/v aqueous solution at 25°C. pH : 7.0±0.2

pH

6.80-7.20

Cultural Response

M1199: Cultural characteristics observed after an incubation at 30°C for 24-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery
Cultural Response			
* <i>Aspergillus brasiliensis</i> ATCC 16404	50-100	luxuriant	
<i>Candida albicans</i> ATCC 10231	50-100	luxuriant	≥70%
<i>Saccharomyces cerevisiae</i> ATCC 9763	50-100	luxuriant	≥70%

Note: *- formerly known as *Aspergillus niger*

Storage and Shelf Life

Store below 30°C in tightly closed container and prepared medium at 2-8° C. Use before expiry period on the label.

Reference

1. Atlas R. M., Handbook of Microbiological Media. 3rd Edition, 2004, CRC Press.

Revision : 02 / 2015

Disclaimer :

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