



Malt Extract Agar Base

M1913

For detection and cultivation of Yeasts.

Composition**

Ingredients	Gms / Litre
Malt extract	20.000
Peptone	1.000
Dextrose	20.000
Agar	20.000

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 61 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 121°C for 15 minutes. Cool to 45-50°C and add 5ml glacial acetic acid and immediately dispense as desired, because the medium cannot be reheated. The final pH is approximately 3.2

Principle And Interpretation

Media based on malt extract may be considered as general growth substrates due to their richness and nutrient balance. They are very suitable for the cultivation of fastidious microorganisms. With acidic pH, they are used for the isolation, cultivation and maintenance of yeast and moulds.

Malt Extract Agar Base is recommended for the detection and cultivation of yeasts (1). Yeasts are more demanding than moulds. Most species are unable to assimilate nitrate and complex carbohydrates; some require vitamins (2). Some yeasts species are capable of growing in the presence of preservative, the most common among these species is *Zygosaccharomyces bailii* but *Candida krusei* and *Pichia fermentans* are also capable of growing in the presence of preservatives.

Malt extract provides carbon, protein and nutrient sources required for the growth of microorganisms. Malt extract provides an acidic environment and nutrients favorable for growth and metabolism of yeasts. Dextrose is the fermentable carbohydrate. The acidified medium inhibits the growth of bacteria and allows good recovery of yeasts and moulds.

Quality Control

Appearance

Yellow to brownish yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Amber coloured clear to slightly opalescent gel forms in Petri plates

Cultural Response

Cultural characteristics observed after an incubation at 25-30°C for 3-5 days.

Organism	Growth
----------	--------

Cultural Response

Candida krusei ATCC 24408 luxuriant

Zygosaccharomyces bailii luxuriant

ATCC MYA-4549

Pichia fermentans ATCC 10651 luxuriant

Storage and Shelf Life

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

Reference

- 1.Third edition of the book Fungi and Food spoilage (Pitt & Hocking, 2009).
- 2.Compendium of methods for the microbiological Examination of foods (Beuchat & Cousin, 2001, Cousin et al., 2001).

Revision : 1 / 2011



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.