



MGYP Agar with Copper

M1846

MGYP Agar with Copper is a selective medium recommended for isolation and cultivation of wild yeasts in the brewing industry.

Composition**

Ingredients	Gms / Litre
Yeast extract	3.000
Malt extract	3.000
Gelatin peptone	5.000
Dextrose	10.000
Cupric sulphate	0.400
Agar	20.000
Final pH (at 25°C)	6.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 41.4 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

Yeasts are unicellular fungi. Yeasts grow well in culture media containing dextrose. They are easily differentiated from most bacteria because of their relatively larger size and morphological features (1). MYGP Agar with copper is used for the isolation and cultivation of wild yeasts in the brewing industry. Copper in the medium inhibits the larger yeasts. Malt extract and yeast extract provide necessary nutrients to support the growth of yeasts. Dextrose is the suitable carbohydrate for the growth of yeasts (2). The acidic pH in the medium inhibits the growth of bacteria and favours the growth of yeasts. This medium is used for testing the quality of beers in Brewery industry.

Quality Control

Appearance

Yellow to brownish yellow homogeneous free flowing powder

Gelling

Firm, comparable with 2.0% Agar gel.

Colour and Clarity of prepared medium

Brownish orange coloured opalescent to hazy gel with precipitate forms in Petri plates.

Reaction

Reaction of 4.14% w/v aqueous solution at 25°C. pH : 6.2±0.2

pH

6.00-6.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 48 hours.

Cultural Response

Organism	Inoculum	Growth	Recovery
Cultural Response <i>Lactobacillus fermentum</i> ATCC 9338	50-100	luxuriant	>=50%
<i>Candida albicans</i> ATCC 10231	50-100	luxuriant	>=50%
<i>Saccharomyces cerevisiae</i> ATCC 9763	50-100	luxuriant	>=50%

<i>Aspergillus brasiliensis</i> ATCC 16404	50-100	luxuriant	$\geq 50\%$
<i>Escherichia coli</i> ATCC 25922	$\geq 10^3$	inhibited	0%

Storage and Shelf Life

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

Reference

1. Pelczar M.J.Jr., Reid R.D., Chan E. C.S,1977, Microbiology, 4th ed, Tata „McGraw Hill Publishing company limited, New Delhi.
2. American Society of Brewing Chemists. Report of subcommittee on Copper Media for Wild Yeast Detection.1992 Journal 50:153.

Revision : 02/ 2016



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.