

CM 21180 - MGYP AGAR WITH COPPER

INTENDED USE

For isolation and cultivation of wild yeasts in the brewing industry.

PRODUCT SUMMARY AND EXPLANATION

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. MYGP Agar with copper is used for the isolation and cultivation of wild yeasts in the brewing industry. This medium is used for testing the quality of beers in Brewery industry.

COMPOSITION

Ingredients	Gms / Ltr
Yeast extract	3.000
Malt extract	3.000
Gelatin peptone	5.000
Dextrose(Glucose)	10.000
Cupric sulphate	0.400
Agar	20.000

PRINCIPLE

Copper in the medium inhibits the larger yeasts. Malt extract and yeast extract provide necessary nutrients to support the growth of yeasts. Dextrose(Glucose) is the suitable carbohydrate for the growth of yeasts. The acidic pH in the medium inhibits the growth of bacteria and favours the growth of yeasts.

INSTRUCTION FOR USE

- Dissolve 41.4 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C. Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder : Yellow to brownish yellow homogeneous free flowing powder.
- Appearance of prepared medium : Brownish orange coloured opalescent to hazy gel with precipitate forms in Petri plates
- pH (at 25°C) : 6.2±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
---------------	------	-------------------	--------	----------	------------------------	-------------------



Lactobacillus fermentum	9338	50-100	Luxuriant	>=70 %	35-37°C	48 Hours
Candida albicans	10231	10-100	Luxuriant	>=70 %	35-37°C	48 Hours
Saccharomyces cerevisiae	9763	10-100	Luxuriant	>=70 %	35-37°C	48 Hours
Aspergillus brasiliensis	16404	10-100	Luxuriant	>=70 %	35-37°C	48 Hours
Escherichia coli	25922	>=10 ³	Inhibited	0%	35-37°C	48 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. American Society of Brewing Chemists. Report of subcommittee on Copper Media for Wild Yeast Detection.1992 Journal 50:153.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. Pelczar M.J.Jr., Reid R.D., Chan E. C.S,1977, Microbiology, 4th ed, Tata McGraw Hill Publishing company limited, New Delhi.

