

TM 1034 – OSMOPHILIC GLUCOSE AGAR (MY 40 G AGAR)

INTENDED USE

For detection and isolation of osmophilic microorganisms from food samples.

PRODUCT SUMMARY AND EXPLANATION

Osmophilic yeasts usually are the cause of spoilage of high-sugar foods, including jams, honey, concentrated fruit juices, chocolate candy with soft centres etc. Organisms that can grow in high concentrations of organic solute, particularly sugars, are called osmophiles. Yeast are the most common osmophilic microorganisms encountered in non-ionic environments of high osmolality, such as foods containing high concentrations of sugar. Osmophilic Glucose Agar formulated by Pivnick and Gabis is prepared as per APHA and is used for the detection and isolation of osmophilic microorganisms like yeasts, which are most commonly encountered in the food industry. MY in MY-40G Agar stands for malt extract and yeast extract and 40 for the 40% of glucose in the medium, which meets the requirements of the medium.

COMPOSITION

Ingredients	Gms / Ltr
Malt extract	12.000
Yeast extract	3.000
Dextrose (Glucose)	400.000
Agar	12.000

PRINCIPLE

The medium consists of malt extract and yeast extract which supply the nitrogenous nutrients, amino acids, vitamins, trace ingredients to the osmophilic yeasts. 40% glucose in the medium satisfies the nutritional need of these yeasts.

INSTRUCTION FOR USE

- Dissolve 42.7 grams in 100 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Steam the medium for 30 minutes. DO NOT AUTOCLAVE. Autoclaving is not required due to reduced water activity.
- Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Off-white to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Medium amber coloured slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 5.5 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Ornithine Decarboxylation	Incubation Temperature	Incubation Period
<i>Saccharomyces rouxii</i>	28253	10-100	Luxuriant	>=70%	Positive reaction, purple colour	25-30°C	Upto 1 Week

PACKAGING:

In pack size of 500 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. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
2. 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.
3. Pivnick H. and Gabis D. A., 1984, In Compendium of Methods for the Microbiological Examination of Foods, 2nd Ed., American Public Health Association, Washington, D.C.
4. Rose A. H. and Harrison J. S., (Eds.), 1970, The Yeasts, Vol. 3, Academic Press, New York.
5. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
6. Tilbury R. H., 1980, "Biology and Activities of Yeasts", Skinner and others (Ed.), Academic Press, London.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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