



OSMOPHILIC GLUCOSE AGAR (MY 40 G AGAR)

TM 1034

for detection and isolation of osmophilic microorganisms from food samples

Composition

Ingredients	Gms/Ltr.
Glucose	400.00
Malt extract	12.00
Yeast extract	3.00
Agar	12.00

* Dehydrated powder, store in a dry place, in tightly-sealed containers at 24°C and protect from direct Sunlight.

Instructions for Use

Dissolve 427.00 gms in 1000ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Steam the medium for 30 minutes. DO NOT AUTOCLAVE. Autoclaving is not required due to reduced water activity

Appearance: Medium amber coloured slightly opalescent

PH (at 25°C): 5.5 ± 0.2

Principle

OSMOPHILIC GLUCOSE AGAR (MY 40 G AGAR) is used for detection and isolation of osmophilic microorganisms from food samples. Osmophilic Glucose Agar formulated by Pivnick and Gabis and prepared as per APHA. 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 osmolarity, such as foods containing high concentrations of sugar. Osmophilic yeasts usually are the cause of spoilage of high-sugar foods, including jams, honey, concentrated fruit juices, chocolate candy with soft centres etc. MY in MY-40G Agar stands for malt extract and yeast extract and 40 for the 40% of glucose in the medium.

Yeast extract and malt extract supply the nitrogenous nutrients, amino acids, vitamins, trace ingredients to the osmophilic yeasts. The nutritional need of yeast is satisfied by 40% glucose.

Interpretation

Cultural characteristics observed after incubation at 25-30°C for upto one week.

Microorganisms	ATCC	Growth
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PRODUCT DATA SHEET

<i>Saccharomyces rouxii</i>	28253	Luxuriant
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References

1. Rose A. H. and Harrison J. S., (Eds.), 1970, *The Yeasts*, Vol. 3, Academic Press, New York.
2. Tilbury R. H., 1980, "Biology and Activities of Yeasts", Skinner and others (Ed.), Academic Press, London.
3. Downes F. P. and Ito K., (Eds.), 2001, *Compendium of Methods for the Microbiological Examination of Foods*, 4th Ed., APHA, Washington, D.C.
4. 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.