OGA Medium (Oxytetracycline Glucose Agar Base) (OGYE)

Cat. 1527

For the enumeration and isolation of yeasts and molds in food stuff

Practical information

Aplications	Categories
Selective enumeration	Yeasts and molds

Industry: Cosmetics / Clinical / Food / Antimicrobial susceptibility testing

Principles and uses

OGA Medium (Oxytetracycline Glucose Agar Base) is a selective medium, introduced by Mossel et al. and recommended for the isolation and enumeration of yeasts and molds in foodstuffs. It can be also used for clinical specimens and cosmetics.

With a neutral pH, the oxytetracycline produces better results than when a low pH medium is used to inhibit bacterial growth. This medium inhibits the acidophilus organisms, Lactobacillus included.

Yeast extract is a source of vitamins, particularly of the B-group essential for bacterial growth. Glucose is the fermentable carbohydrate as an energy source. Bacteriological agar is the solidifying agent.

Formula in g/L

Glucose	10	Bacteriological agar	15
Yeast extract	5		

Preparation

Suspend 15 grams of the medium in 500 ml of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121 ºC for 10 minutes. Cool to 45-50 ºC and aseptically add one vial of OGA Supplement (Cat. 6018). Homogenize gently and dispense into Petri dishes.

Instructions for use

For the enumeration and isolation of yeasts and molds in food stuff:
- The pour plate method is recommended.
- Inoculate 1 ml of 10^-1 diluted food sample and incubate at 20-25 ºC.
- Examine daily from the 2nd to the 6th day for the formation of aerial mycelia.
- Count numbers of colonies in plates where there are 50-100 colonies after 5 days.
- Calculate number of yeasts or molds per 1 g or 1 ml by multiplying the number of colonies by the dilution factor.

(*) When examining fecal specimens from patients under tetracycline treatment, Enterobacteriaceae are not adequately inhibited. Oxytetracycline should then be replaced by Gentamicin.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)

w/o rests	Fine powder	Beige	Yellowish-white	6,5±0,2

Microbiological test

Incubation conditions: (20-25 ºC / 5-7 days).

Microorganisms	Specification
Candida albicans ATCC 10231	Good growth
Aspergillus brasiliensis ATCC 16404	Good growth
Escherichia coli ATCC 25922	Inhibited growth
Pseudomonas aeruginosa ATCC 27853	Inhibited growth
Penicillium chrysogenun ATCC 8537	Good growth

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

American Public Health Association. Standard Methods for the Examination of Dairy Products, 1 3th Ed. APHA, Inc. New York, 1960. Thom and Raper, Manual of the Aspergili 39:194
MOSSEL, D.A.A., KLEYNEN-SEMMELING, A.M.C., a. VENCENTE, H.M.: Oxytetracycline-Glucose-Yeast Extract Agar for selective enumeration of moulds and yeasts in foods and clinical material. - J. Appl. Bact., 33; 454-457 (1970).