

TM 799 – OXYTETRA GLUCOSE YEAST AGAR BASE (OGYE AGAR BASE)

INTENDED USE

For selective isolation and enumeration of yeast and molds in food products.

PRODUCT SUMMARY AND EXPLANATION

Acidic media are not completely suitable for counting yeasts and moulds in foods since yeast cells, stressed by heat do not tolerate the acidic conditions necessary to inhibit bacterial contamination. Yeast and moulds growth is often limited by the presence of acid-tolerant bacterial flora. Therefore, it is evident that more active media and different selective agents are needed in order to deal with various kinds of foodstuffs, incubation conditions and types of microorganisms to be studied. Under certain conditions and when testing certain foods like milk and milk products, the use of oxytetracycline alone was not sufficient to obtain reliable yeast and moulds counts. OGYE Agar Base is formulated by Mossel et al for the selective isolation and enumeration of yeast and moulds from foods. They found that addition of Oxytetra selective supplement to a neutral pH medium increased the recovery / count of yeast and moulds as compared to acidified medium.

The choice of a suitable media for enumeration of yeasts and moulds greatly depends on the nature of foodstuffs to be tested and the organisms that grow on them. These media remain bacteriostatic when inoculated with not greater than 1 ml of a 10⁻¹ food dilution and incubation at 22°C. The number of yeasts or moulds is calculated per one gram or 1 ml of sample under investigation by multiplying the number of colonies with the dilution factor. Lactic acid bacteria are inhibited on this medium.

COMPOSITION

Ingredients	Gms / Ltr
Yeast extract	5.000
Dextrose (Glucose)	20.000
Agar	12.000

PRINCIPLE

The medium consists of Yeast extract which provides essential growth nutrients. Dextrose acts as carbon and energy source. Low pH helps to reduce the bacterial flora. Oxytetracycline makes the medium more selective by inhibiting the growth of *Lactobacilli* encountered in milk and milk-products at low pH.

INSTRUCTION FOR USE

- Dissolve 18.5 grams in 500 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 and aseptically add reconstituted contents of one vial of Oxytetra Selective Supplement.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to light yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.0 ± 0.2

INTERPRETATION



Cultural characteristics observed with added 1 vial of Oxytetra Selective Supplement after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Aspergillus niger</i>	16404	10-100	Good-luxuriant	>=50%	25-30°C	2-5 Days
<i>Escherichia coli</i>	25922	>=10 ⁴	Inhibited	0%	25-30°C	2-5 Days
<i>Candida albicans</i>	10231	10-100	Good-luxuriant	>=50%	25-30°C	2-5 Days
<i>Saccharomyces cerevisiae</i>	9763	10-100	Good-luxuriant	>=50%	25-30°C	2-5 Days
<i>Saccharomyces uvarum</i>	9080	10-100	Good-luxuriant	>=50%	25-30°C	2-5 Days

PACKAGING:

In pack size of 100 gm and 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. Mossel D. A. A., Kleylen-Semmeling H. M., Vincetie H., Beerens H. and Catsaras M., 1970, J. Appl. Bacteriol., 33:454
2. Mossel D. A. A., Visser M. and Mengerink W. H. J., 1962, Lab. Pract. 11:109.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.



 GMP Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 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**
Revision: 27 Oct., 2023