

## CM 21,345 – OXYTETRA GLUCOSE YEAST AGAR BASE W/ BIOTIN

### INTENDED USE

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

### PRODUCT SUMMARY AND EXPLANATION

Oxytetra Glucose Yeast Agar Base w/ Biotin were originally formulated by Mossel et al for the isolation and enumeration of yeasts and moulds from foodstuffs. Mossel et al further added Oxytetracycline as a selective agent and found that the use of Oxytetracycline in a medium with a neutral pH gives increased counts of yeasts and moulds as compared to media having a low pH to suppress bacterial growth.

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<sup>-1</sup> 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      | 20.000    |
| Biotin        | 0.0001    |
| Agar          | 12.000    |

### PRINCIPLE

The medium consists of Yeast extract which provides essential growth nutrients. Dextrose acts as carbon and energy source. Oxytetracycline makes the medium more selective by inhibiting the growth of Lactobacilli encountered in milk and milk-products at low pH. Biotin is used as a vital growth factor for lactose utilizing yeast.

### 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 |
|--------------------------|-------|-------------------|----------------|----------|------------------------|-------------------|
| Aspergillus niger        | 16404 | 10-100            | Good-luxuriant | >=50%    | 25-30°C                | 2-5 Days          |
| Escherichia coli         | 25922 | >=10 <sup>3</sup> | Inhibited      | 0%       | 25-30°C                | 2-5 Days          |
| Candida albicans         | 10231 | 10-100            | Good-luxuriant | >=50%    | 25-30°C                | 2-5 Days          |
| Saccharomyces cerevisiae | 9763  | 10-100            | Good-luxuriant | >=50%    | 25-30°C                | 2-5 Days          |
| Saccharomyces uvarum     | 9080  | 10-100            | Good-luxuriant | >=50%    | 25-30°C                | 2-5 Days          |

#### 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

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

#### REFERENCES

1. Mossel D.A.A. et al, 1970, J. Appl. Bact., 33:454.
2. Mossel D.A.A., Harrewijn G.A. and Elzebrock J.M., 1973, UNICEF.
3. Mossel D.A.A., Visser M. and Mengerink W.H.J., 1962, Lab. Prac. II:109.
4. Mossel D.A.A., Vega Clara L. and Put H.M.C., 1975, J. Appl. Bact., 39:15.



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

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

\*For LabUse Only

