

## CM 21,361 – PEPTONE YEAST DEXTROSE BROTH (CANTINO)

### INTENDED USE

For cultivation of aquatic fungi like *Blastocladiella* species.

### PRODUCT SUMMARY AND EXPLANATION

Peptone Yeast Dextrose Broth (Cantino) was formulated by Cantino for use in the cultivation of aquatic fungi like *Blastocladiella* species. These aquatic fungi grow well when a sugar like dextrose is present in the medium. Cantino reported that *Blastocladiella* grow luxuriantly under visible light illumination due to increased CO<sub>2</sub> fixation. Peptone Yeast Dextrose Broth (Cantino) is also recommended for the cultivation of *Eikenella corrodens*. *E. corrodens* is part of the resident microflora of mucous membrane surfaces in humans. Even though *E. corrodens* is generally regarded as an organism of low virulence, it is usually involved in mixed bacterial infections, often with the viridans groups *Streptococci* and less frequently with various members of the *Enterobacteriaceae*.

### COMPOSITION

| Ingredients                    | Gms / Ltr |
|--------------------------------|-----------|
| Peptic digest of animal tissue | 1.250     |
| Yeast extract                  | 1.250     |
| Dextrose                       | 3.000     |

### PRINCIPLE

This medium consists of Peptic digest of animal tissue and yeast extract, which supply the nitrogenous nutrients, vitamin B complex, peptides and trace ingredients for the growth of aquatic fungi and *E. corrodens*. Dextrose is the energy source.

### INSTRUCTION FOR USE

- Dissolve 5.5 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense as desired.

### QUALITY CONTROL SPECIFICATIONS

|                               |                                                        |
|-------------------------------|--------------------------------------------------------|
| Appearance of Powder          | : Off-white to yellow homogeneous free flowing powder. |
| Appearance of prepared medium | : Yellow coloured clear solution in tubes.             |
| pH (at 25°C)                  | : 6.8 ± 0.2                                            |

### INTERPRETATION

Cultural characteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Incubation Temperature | Incubation Period |
|---------------|------|-------------------|--------|------------------------|-------------------|
|---------------|------|-------------------|--------|------------------------|-------------------|



|                           |       |        |           |         |        |
|---------------------------|-------|--------|-----------|---------|--------|
| Blastocladiella emersonii | 22665 | 10-100 | Luxuriant | 25-30°C | 8 Days |
| Candida albicans          | 10231 | 10-100 | Luxuriant | 25-30°C | 8 Days |
| Eikenella corrodens       | 23834 | 50-100 | Luxuriant | 25-30°C | 8 Days |
| Saccharomyces cerevisiae  | 9763  | 10-100 | Luxuriant | 25-30°C | 8 Days |

#### PACKAGING:

In pack size of 100 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. Cantino E. C., 1961, Mycologia, 48: 225.
2. Recheigl Jr., (Ed.), 1978, Handbook Series in Nutrition and Food, Section G., Vol. III, CRC Press Inc.
3. Atlas R. M., 2004, Handbook of Microbiological Media, Lawrence C. Parks (Ed.), 3rd Edition, CRC Press.
4. Balows A., Truper H. G., Dworkin M., Harder W., Schleifer K. H., (Eds.), 1992, The Prokaryotes, 2nd Ed., Vol. III, Springer Verlag.

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|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <br>GMP<br>Good Manufacturing<br>Practices Certified | <br>Best Before                          | <br>QTY.<br>Quantity                  | <br>REF<br>Catalogue Number | <br>Manufacturer |
| <br>Temperature Unit                                 | <br>LOT/<br>B. NO.<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 Lab Use Only

