

## CM 20771 - GLUCOSE YEAST EXTRACT AGAR

### INTENDED USE

For cultivation of Lactobacilli in pharma products.

### PRODUCT SUMMARY AND EXPLANATION

Glucose Yeast Extract Agar is prepared according to the formula described by Evans and Niven and Rogosa et.al. and is used for enumeration and cultivation of Lactobacilli in pharmaceutical preparations.

### COMPOSITION

| Ingredients                    | Gms / Ltr |
|--------------------------------|-----------|
| Peptone                        | 5.000     |
| Yeast extract                  | 5.000     |
| Dextrose (Glucose)             | 2.000     |
| Potassium dihydrogen phosphate | 0.500     |
| Dipotassium hydrogen phosphate | 0.500     |
| Magnesium sulphate             | 0.300     |
| Sodium chloride                | 0.010     |
| Manganese sulphate             | 0.010     |
| Zinc sulphate                  | 0.0016    |
| Copper sulphate                | 0.0016    |
| Cobalt sulphate                | 0.0016    |
| Agar                           | 15.000    |

### PRINCIPLE

The medium contains variety of salts like sulphates, phosphates to support the growth of Lactobacilli. Necessary nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and essential growth nutrients for Lactobacilli are provided by peptone and yeast extract. Glucose is the source of fermentable carbohydrate. The metallic salts are sources of ions essential for the replication of lactic acid bacteria.

### INSTRUCTION FOR USE

Dissolve 28.32 grams in 1000 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. Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to beige homogeneous free flowing powder.  
Appearance of prepared medium : Yellow coloured, clear to slightly opalescent gel forms in Petri plates.  
pH (at 25°C) : 7.2±0.2

### INTERPRETATION

Cultural characteristics observed after an incubation.



| Microorganism                               | ATCC  | Inoculum (CFU/ml) | Growth         | Recovery | Incubation Temperature | Incubation Period |
|---------------------------------------------|-------|-------------------|----------------|----------|------------------------|-------------------|
| Lactobacillus acidophilus                   | 4356  | 50-100            | Good-luxuriant | >=50%    | 35 - 37°C              | 24 - 48 Hours     |
| Lactobacillus delbrueckii subsp. bulgaricus | 11842 | 50-100            | Good-luxuriant | >=50%    | 35 - 37°C              | 24 - 48 Hours     |
| Lactobacillus casei                         | 9595  | 50-100            | Good-luxuriant | >=50%    | 35 - 37°C              | 24 - 48 Hours     |

#### 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.

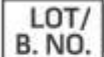
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

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

#### REFERENCES

1. Evans and Niven, 1951, J. Bacteriol., 62:599.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. Rogosa M., Mitchell J. A. and Wiseman R. F., 1951, J. Bacteriol., 62 :132.
5. Seppo Salminen, Atte von Wright and Arthur Ouweh and, Lactic Acid Bacteria., Microbiological and Functional Aspects, 3rd Ed., Marcel and Dekker. NY. Basel.

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|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <br>Good Manufacturing<br>Practices Certified | <br>Best Before        | <br>Quantity                          | <br>Catalogue Number | <br>Manufacturer |
| <br>Temperature Unit                          | <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

