

TM 585 - 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
<i>Lactobacillus acidophilus</i>	4356	50-100	Good-luxuriant	>=50%	35 - 37°C	24 - 48 Hours
<i>Lactobacillus delbrueckii subsp. bulgaricus</i>	11842	50-100	Good-luxuriant	>=50%	35 - 37°C	24 - 48 Hours
<i>Lactobacillus casei</i>	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.







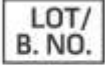


Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

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.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. 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: 08 Nov., 2019

