

TM 1549 - GLUCOSE YEAST EXTRACT ACETATE BROTH

INTENDED USE

For cultivation of *Lactobacillus* species.

PRODUCT SUMMARY AND EXPLANATION

Glucose Yeast Extract Acetate Broth is prepared by slight modification of the formula described by Evans and Niven and Rogosa et al and is used for enumerating Lactobacilli in pharmaceutical preparations.

COMPOSITION

Ingredients	Gms / Ltr
Sodium acetate	10.000
Peptone	10.000
Yeast extract	10.000
Dextrose (Glucose)	10.000
Dipotassium hydrogen phosphate	0.250
Potassium dihydrogen phosphate	0.250
Magnesium sulphate	0.100
Ferrous sulphate	0.005
Manganese sulphate	0.005
Sodium chloride	0.005

PRINCIPLE

It contains a variety of salts like sulphates, phosphates to support the growth of Lactobacilli. Necessary nitrogenous 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. Sodium acetate inhibits Streptococci, moulds and many other organisms.

INSTRUCTION FOR USE

- Dissolve 40.61 grams in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow coloured homogeneous free flowing powder.
Appearance of prepared medium : Light yellow coloured clear solution without any precipitate.
pH (at 25°C) : 6.9±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Lactobacillus acidophilus</i>	4356	50-100	Luxuriant	35 - 37°C	24 - 48 Hours
<i>Lactobacillus delbrueckii subsp. bulgaricus</i>	11842	50-100	Luxuriant	35 - 37°C	24 - 48 Hours
<i>Lactobacillus rhamnosus</i>	9595	50-100	Luxuriant	35 - 37°C	24 - 48 Hours
<i>Lactobacillus leichmannii</i>	4797	50-100	Luxuriant	35 - 37°C	24 - 48 Hours
<i>Lactobacillus plantarum</i>	8014	50-100	Luxuriant	35 - 37°C	24 - 48 Hours

PACKAGING:

In pack size of 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. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. Evans and Niven, 1951, J. Bact., 62:599.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. 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.
5. Rogosa M., Mitchell J.A. and Wiseman R.F., 1951, J. Bact., 62:132.
6. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
7. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.



 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**
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