

Product Data Sheet

ELLIKER BROTH (LACTOBACILLI BROTH) Product No. GB-DCM-00309-1A

INTENDED USE

For cultivation of Lactobacilli & Streptococci which are important in dairy industry.

PRODUCT SUMMARY

Lactic acid bacteria found in dairy products are a diverse group consisting primarily of Streptococcus, Lactococcus, Leuconostoc and homofermentative and heterofermentative Lactobacillus species. Testing for lactic acid bacteria in dairy products may be useful for determining the cause of acid defects in products and evaluating lactic starter cultures and thus controlling the quality of curds, cheese, cultured milks etc. Elliker Broth, recommended by APHA, is used for culturing Streptococci and lactobacilli in the dairy industry. Elliker, Anderson and Hannesson developed Elliker Broth, which was further modified by McLaughlin.

Product Specifications

Ingredients	Gms / Ltr
Tryptone	20.000
Yeast extract	5.000
Gelatin	2.500
Dextrose (Glucose)	5.000
Lactose	5.000
Saccharose (Sucrose)	5.000
Sodium chloride	4.000
Sodium acetate 1.500 Ascorbic acid	0.500

PRINCIPLE

The medium consists of Tryptone and gelatin that provide nitrogen to the organisms. Yeast extract serves as the source of vitamin. Dextrose, lactose and Saccharose are the fermentable carbohydrates and hence the sources of energy. Sodium chloride maintains the osmotic equilibrium of the medium. With the addition of ascorbic acid, the medium becomes slightly acidic which supports the growth of lactobacilli. Sodium acetate has an inhibitory effect on gramnegative bacteria and moulds, without affecting the growth of lactobacilli.



INSTRUCTION FOR USE

- Dissolve 48.5 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. Cool to 45-50°C..

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Cream to yellow homogeneous free flowing powder.

Appearance of prepared Light amber coloured, clear solution without any precipitate

pH (at 25°C): 6.8± 0.2

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Lactobacillus casei	7469	50-100	Luxuriant	35-37°C	18-48 Hours
Lactococcus lactis	19435	50-100	Luxuriant	35-37°C	18-48 Hours
Lactobacillus plantarum	8014	50-100	Luxuriant	35-37°C	18-48 Hours
Streptococcus cremoris	19257	50-100	Luxuriant	35-37°C	18-48 Hours
Streptococcus thermophilus	14485	50-100	Good- luxuriant	35-37°C	18-48 Hours



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.

This product is for research use only.