Elliker Broth

Intended Use
Elliker Broth is a medium used for cultivating Streptococci and Lactobacilli, especially in dairy procedures.

Summary
Elliker Medium, also known as Lactobacilli Broth, is a medium recommended for the general cultivation of Streptococci and Lactobacilli.
Testing dairy products for lactic acid bacteria facilitates the determination of acid levels, evaluation of lactic starter cultures and helps to control the quality of cured cheese, cultured milks and uncultured products. The medium is prepared according to the formula of Elliker, which has a slightly acidic pH and contains sufficient nutrients to support the growth of these gram-positive microorganisms.

Principle
Gelatin, Casein enzymic hydrolysate and yeast extract provide the essential nutrients for growth. Lactose, sucrose and dextrose are the fermentable carbohydrates providing carbon and energy. Ascorbic acid provides adequate acid conditions. Sodium chloride supplies essential electrolytes for transport and osmotic balance and sodium acetate is the selective agent inhibiting gram-negative bacteria and moulds, without affecting the growth of lactobacilli. and also acts as a buffer system.

Formula*

Ingredients	**g/L**
Pancreatic Digest of Casein	20.0
Yeast Extract	5.0
Gelatin	2.5
Dextrose	5.0
Lactose	5.0
Saccharose	5.0
Sodium Chloride	4.0
Sodium Acetate	1.5
Ascorbic Acid	0.5
Final pH (at 25°C)	6.8 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label.

Type of specimen
Food samples

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 48.50 g of the powder in 1000 mL purified / distilled water.
2. Heat if necessary, to dissolve the powder completely.
3. Dispense in test tubes and sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Cream to yellow coloured, homogenous, free flowing powder.
Prepared Appearance: Light to medium amber coloured, clear to slightly opalescent solution.
Cultural Response: Cultural characteristics observed after an incubation of 24-48 hours at 35-37°C.

Organisms (ATCC)	Growth
Lactobacillus casei (7469)	Good
Lactobacillus lactis (19435)	Good
Lactobacillus plantarum (8014)	Good
Streptococcus cremoris (19257)	Good
Streptococcus thermophilus (14485)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Elliker, P.R.A. W. Anderson and G. Hannesson 1956. An agar culture medium for lactic acid streptococci and lactobacilli. J. Dairy Sci. 39:1611 Splittstoesg.
2. Vanderzant C. and D.F. Splittstoes 1992. Compendium of methods for the microbiological association of good, APHA 3rd edition.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201050570100	Dehydrated Culture Media	500 g
201050570500	Dehydrated Culture Media	500 g