

TECHNICAL DATA SHEET

ELLIKER BROTH

ENUMERATION OF *LACTOBACILLUS* AND LACTIC *STREPTOCOCCI*

1 INTENDED USE

Elliker Broth, prepared according to the formula of Elliker, Anderson and Hannesson, contains the nutritive elements necessary for the growth of lactobacilli and lactic streptococci (including *Lactococcus*) in dairy products.

2 TYPICAL COMPOSITION

The composition can be adjusted in order to obtain optimal performance.

For 1 liter of media :

- Tryptone	20,0 g
- Yeast Extract	5,0 g
- Gelatin	2,5 g
- Lactose	5,0 g
- Saccharose	5,0 g
- Glucose	5,0 g
- Sodium acetate	1,5 g
- Sodium chloride	4,0 g
- Ascorbic acid	0,5 g

pH of the ready-to-use media at 25 °C : 6,8 ± 0,2.

3 PREPARATION

- Dissolve 48,5 g of dehydrated media (BK054) in 1 liter of distilled or demineralized water.
- Slowly bring to boiling, stirring until complete dissolution.
- Divide into tubes at 10 mL per tube or into vials.
- Sterilize in an autoclave at 121°C for 15 minutes.
- Cool to room temperature.

✓ **Reconstitution :**
48,5 g/L

✓ **Sterilization :**
15 min at 121 °C

4 INSTRUCTIONS FOR USE

- Inoculate the tubes with 1 mL of the product to test and its serial dilutions.
- Incubate at 37 °C for 3 to 5 days.

✓ **Inoculation :**
1 mL

✓ **Incubation :**
3 to 5 days at 37 °C

5 RESULTS

Growth is demonstrated by turbidity in the tubes.

6 QUALITY CONTROL

Dehydrated media : white-cream powder, free-flowing and homogeneous.

Prepared media : slightly gelatinous, amber, limpid.

Typical culture response after 48 hours of incubation at 37 °C, inoculum $\leq 10^2$ microorganisms :

Microorganisms		Growth
<i>Lactobacillus bulgaricus</i>	WDCM 00102	Positive
<i>Lactobacillus casei</i> subsp. <i>rahamnosus</i>	WDCM 00101	Positive
<i>Lactococcus lactis</i> subsp. <i>lactis</i>	ATCC® 11454	Positive
<i>Streptococcus thermophilus</i>	ATCC 14485	Positive

7 STORAGE / SHELF LIFE

Dehydrated media : 2-30 °C.

The expiration date is indicated on the label.

Prepared media in tubes or vials (*) : 180 days at 2-25 °C.

(*) Benchmark value determined under standard preparation conditions, following manufacturer's instructions.

8 PACKAGING

Dehydrated media :

500 g bottle BK054HA

9 BIBLIOGRAPHY

McLaughlin, C.B. 1946. Readily prepared medium for cultivation of lactobacilli. J. Bacteriol., 51: 560.

Elliker, P.R., Anderson, A.W., and Hannesson, G. 1956. An agar culture medium for lactic acid streptococci and lactobacilli. J. Dairy. Sci., 39: 1611.

Hausler, W.J. Ed. 1976. Standard Methods for the Examination of Dairy Products, 14th Ed. Washington D.C. American Public Health Association.

10 ADDITIONAL INFORMATION

The information provided on the labels take precedence over the formulations or instructions described in this document and are susceptible to modification at any time, without warning.

Document code : ELLIKER BROTH_ENV7.

Creation date : 03-2000

Updated : 05-2016

Origin of revision : General update.