

TECHNICAL DATA SHEET

LACTOSE BROTH

ENRICHMENT FOR COLIFORMS

1 INTENDED USE

Lactose Broth is used principally as a liquid enrichment media for the detection of *Escherichia coli* in cosmetic products, if neutralizers or dispersal agents are not necessary. It is also adapted to the culture of all Gram negative bacteria. Armed with a Durham tube, it can detect the fermentation of lactose.

The typical composition responds to that defined in the standard NF EN ISO 21150.

2 PRINCIPLES

This nutrient medium contains no inhibitors or indicators and enables the growth of *Enterobacteriaceae*.

Lactose fermentation is shown by the production of gas in Durham tubes.

3 TYPICAL COMPOSITION

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

For 1 liter of media :

- Pancreatic digest of gelatin..... 5,0 g
- Meat extract..... 3,0 g
- Lactose..... 5,0 g

pH of the ready-to-use media at 25 °C : 6,9 ± 0,2.

4 PREPARATION

- Dissolve 13,0 g of dehydrated media (BK082) in 1 liter of distilled or demineralized water.
- Stir slowly until complete dissolution.
- Dispense in 16 x 160 mm tubes containing a Durham tube, or in flasks.
- Sterilize in an autoclave at 121°C for 15 minutes.
- Cool to room temperature.

✓ **Reconstitution :**
13,0 g/L

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

5 INSTRUCTIONS FOR USE

- Transfer the inoculum to the tubes prepared as above..
- Incubate at 30-35 °C for 20 to 72 hours.

NOTE :

For other uses, refer to the protocols or standards in vigor.

6 RESULTS

The presence of coliform bacteria is demonstrated by the production of gas, observed in the Durham tubes.

7 QUALITY CONTROL

Dehydrated media : light beige powder, free-flowing and homogeneous.

Prepared media : amber solution, limpid.

Typical culture response after 20 hours of incubation at 30-35°C, inoculum $\leq 10^2$ microorganisms (NF EN ISO 21150):

| Microorganisms | Growth | Gas production |
|------------------------------------|----------|----------------|
| <i>Escherichia coli</i> WDCM 00012 | Positive | Positive |

8 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.

9 PACKAGING

Dehydrated media :

500 g bottle BK082HA

10 BIBLIOGRAPHY

Hausler, W.J. Jr.. 1972. Standard Methods for the Examination of Dairy Products. 13th Ed. American Public Health Association, Wasington D.C..

American Public Health Association. 1975. Standard Methods for the Examination of Water and Wastewater. 14th Ed. Washington D.C.

Rodier, J. . 1984. L'analyse de l'eau. Dénombrement des coliformes fécaux et *Escherichia coli* présumés. Dunod 7ème Ed., 793-798.

NF EN ISO 21150. Septembre 2009. Cosmétiques. Microbiologie. Détection d'*Escherichia coli*.

11 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.

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