

EC BROTH**For microbiological control only**

Selective broth for the detection of coliform bacteria

SUMMARY AND EXPLANATION

EC broth is used for the detection of coliforms and *E.coli* in waters, milk and shells. This broth can be used for the enumeration of these species using the MPN method. It has to be used after a selective enrichment broth.(1,2)

PRINCIPLE

It contains a peptone as a nutritive source and lactose as source of carbon for coliforms. Bile acids inhibit the growth of Gram-positive bacteria such as *Bacillus* and faecal streptococci. The phosphate buffer allows to control Ph variations caused by lactose fermentation.

CONTENT OF THE KIT

Ready-to-use medium	
REF AEB110619AF	Pack of 100 tubes of 10ml +Durham enclosure
ECB*	

* : Printed on the container

COMPOSITION**Theoretical formula.**

This medium can be adjusted and/or supplemented according to the performance criteria required:

Digestat enzymatique de caséine	20,0 g
Lactose.....	5,0 g
Bil acids n°3.....	1,5 g
Potassium monohydrogen phosphate.....	4,0 g
Potassium dihydrogen phosphate	1,5 g
Sodium chloride.....	5,0 g
Purified water.....	1000 ml

pH: 6,8

REAGENTS AND MATERIAL REQUIRED BUT NOT PROVIDED**Reagents :**

- Buffered Peptone water (ex : Ref 42043)
- Lauryl sulfate broth (ex : Ref. AEB110529)

Material :

- Bacteriology incubator

WARNINGS AND PRECAUTIONS

- **For microbiological control only.**
- **For professional use only.**
- This kit contains products of animal origin. Certified knowledge of the origin and/or sanitary state of the animals does not totally guarantee the absence of transmissible pathogenic agents. It is therefore recommended that these products be treated as potentially infectious, and handled observing the usual safety precautions (do not ingest or inhale).
- All specimens, microbial cultures and inoculated products should be considered infectious and handled appropriately. Aseptic technique and usual precautions for handling the bacterial group studied should be observed throughout this procedure. Refer to "CLSI® M29-A, *Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline – Current Revision*". For additional information on handling precautions, refer to "Biosafety in Microbiological and Biomedical Laboratories – CDC/NIH – Latest edition", or the current regulations in the country of use.

- Culture media should not be used as manufacturing material or components.
- Do not use reagents past the expiry date.
- Do not use reagents if the packaging is damaged.
- Do not use tubes which show signs of contamination.
- The medium must be used according to the procedure indicated in this package insert. Any change or modification in the procedure may affect the results.

STORAGE CONDITIONS

- **Store the tubes at 2- 25°C in their box until the expiry date.**

SPECIMENS

Follow the recommendations in the current standards to perform specimen collection and preparation.

INSTRUCTIONS FOR USE

Refer to the instructions for use described in the current ISO 7251 standard. (2)

READING AND INTERPRETATION

Mark the production of gas inside the bells. Perform the appropriate confirmation tests (eg: indole test in buffered water) and express the results according to the number of positive tubes (MPN).

QUALITY CONTROL

The EC broth has been designed and developed to meet the strictest quality requirements.

The results obtained using strains tested during controls for bacteriological activity are shown on the quality control certificate for each batch, available from our website (www.biomerieux.com).

LIMITATIONS TEST

A light white precipitate can show at the bottom of the tubes. This precipitate has no impact on the broth properties.

WASTE DISPOSAL

Unused reagents may be considered as non hazardous waste and disposed of accordingly.








Dispose of all used reagents as well as any other contaminated disposable materials following procedures for infectious or potentially infectious products.

It is the responsibility of each laboratory to handle waste and effluents produced according to their nature and degree of hazardousness and to treat and dispose of them (or have them treated and disposed of) in accordance with any applicable regulations.

LITERATURE REFERENCES

1. Hajna and Perry, 1943. Am. J. Public Health **33** :550
2. Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of presumptive *Escherichia coli* — Most probable number technique – ISO 7251

INDEX OF SYMBOLS

Symbol	Meaning
	Catalogue number
	Manufacturer
	Temperature limit
	Use by date
	Batch code
	Consult Instructions for Use
	Quality control certificate Batch conform to current Quality Control Protocol

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