

m-Endo Agar LES

Medium for enumerating coliforms in water by membrane filtration technique, according to APHA.

TYPICAL FORMULA	(g/l)
Casein Hydrolysate	3.7
Meat Peptone	3.7
Tryptose	7.5
Yeast Extract	1.2
Lactose	9.4
Di-potassium Hydrogen Phosphate	3.3
Potassium Hydrogen Phosphate	1.0
Sodium Chloride	3.7
Sodium Deoxycholate	0.1
Sodium Lauryl Sulfate	0.05
Sodium Sulfite	1.6
Basic Fuchsin	0.8
Agar	15.0
Final pH 7.2 ± 0.2 at 25°C	

DESCRIPTION

m-Endo Agar LES ISO is a medium used for the detection and enumeration of coliform bacteria in water samples, according to APHA.

PRINCIPLE

Casein hydrolysate, meat peptone and tryptose provide amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Yeast extract is a source of vitamins, particularly of B-group. Lactose is the fermentable carbohydrate. Phosphates act as buffer. Sodium chloride maintains the osmotic balance of the medium. Sodium deoxycholate and sodio lauril solfato inhibit the accompanying microbial flora. Basic fuchsin is the pH indicator. Agar is the solidifying agent.

PREPARATION

Suspend 51 g of powder in 1 liter of deionized or distilled water containing 20 ml of ethanol 96%. Bring to boil and shake until completely dissolved. DO NOT AUTOCLAVE. Cool up to 45-50°C. Aseptically, pour in Petri dishes.

TECHNIQUE

The American Public Health Association recommends to carry out a preliminary enrichment step in Lauryl Sulfate Tryptose Broth (ref. 21453) by using the filter membrane technique. After 1.5-2 h incubation at 35°C, transfer the membrane to a plate of m-Endo Agar LES and incubate aerobically at 35 ± 0.5°C for 20-24 hours.

INTERPRETATION OF RESULTS

Lactose fermenters form red colonies with or without metallic sheen.
Bacteria which do not ferment lactose develop clear colorless colonies.
Count as coliforms all the red colonies having the characteristic metallic sheen.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES

- American Public Health Association (1998) Standard Methods for the Examination of Water and Wastewater. 20th Ed, APHA Inc, Washington DC.

Distribué par :

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PRODUCT SPECIFICATIONS

NAME

m-Endo Agar LES

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGING

Ref.	Content	Packaging
611011	500 g	500 g of powder in plastic bottle
621011	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM

7.2 ± 0.2

USE

m-Endo Agar LES ISO is a medium used for the detection and enumeration of coliform bacteria in water samples, according to APHA

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Powder medium

Appearance: free-flowing, homogeneous

Colour: purple

Ready-to-use medium

Appearance: slightly opalescent with precipitate

Colour: pink

SHELF LIFE








4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
 Inoculum for productivity: 50-100 CFU
 Inoculum for selectivity: 10⁴-10⁶ CFU
 Incubation Conditions: 20-24 h at 35 ± 0.5°C, in aerobiosis

Microorganism		Growth	Colony color
<i>Escherichia coli</i>	ATCC® 25922	Good	Red, metallic sheen
<i>Salmonella</i> Typhimurium	ATCC® 14028	Good	Pink
<i>Staphylococcus aureus</i>	ATCC® 25923	Inhibited	---

TABLE OF SYMBOLS

LOT Batch code	 Do not reuse	 Manufacturer	 Use by	 Fragile, handle with care
REF Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult instructions for use	

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