Technical Data Sheet

# m-Endo LES agar

Art. **84645.0500**

DEHYDRATED MEDIUM

## Intended use

Medium for detecting and enumerating coliforms in water and food, by the membrane filter method.

## Formula * - Composition in g/L

| | |
|---|---|
| Peptone | 15.000 |
| Yeast extract | 1.200 |
| Lactose | 9.400 |
| Sodium chloride | 3.700 |
| Dipotassium phosphate | 3.300 |
| Potassium phosphate | 1.000 |
| Sodium deoxycholate | 0.100 |
| Sodium laurylsulphate | 0.050 |
| Sodium sulphite | 1.600 |
| Basic Fuchsin | 0.800 |
| Agar | 15.000 |

Final pH 7.2 ±0.2 at 25 ºC

* Adjusted and /or supplemented as required to meet performance criteria

## Instructions for preparation

Mix 51.2 g of powder with 20 ml of ethanol, stir until obtaining a paste. Add purified water up to 1 l and bring to the boil. DO NOT AUTOCLAVE. Mix and pour into Petri plates. Do not overheat.

## Principle of the method and general information

Modification of classical culture medium, Endo Agar, which is obtained to better growth and a more intense metallic sheen coliforms.

## Instruction for use

Membranes that have filtered the sample are incubated at 35°C+/-2ºC for 2-3 hours over a pad with Lauryl sulfate broth and then they are transferred to a plate with m-Endo LES agar. Incubate at 35°C+/-2ºC for 18-24 hours. Coliform colonies appear red with the characteristic metallic sheen.

## Quality control

**Incubation temperature:** 35°C ±2,0 **Incubation time:** 18-24 h

**Inoculum:** Practical range 100±20 CFU. Min. 50 CFU (Productivity) / 104-106 CFU (Selectivity) according to ISO 11133:2014.

| Microorganism | Growth | Remarks |
|---|---|---|
| *Enterococcus faecalis* ATCC® 29212 | Inhibited | Selectivity |
| *Escherichia coli* ATCC® 8739 | Productivity > 0.50 | Pink-red colonies w. green metalic shine |
| *Escherichia coli* ATCC® 11775 | Productivity > 0.50 | Pink-red colonies w. green metalic shine |
| *Escherichia coli* ATCC® 25922 | Productivity > 0.50 | Pink-red colonies w. green metalic shine |
| *Salmonella typhimurium* ATCC® 14028 | Productivity > 0.50 | Colourless colonies w/o green metalic shine |

## References


· ATLAS, R.M., L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press Inc. London.

· CLESCERI, L.S., A.E. GREENBERG & A.D. EATON (Editors) (1998) Standard Methods for the Examination of Water and Wastewater. 20th. Ed. APHA-AWWA-WEF, Washington DC.

· McCARTHY, J.A., J.E. DELANEY & R.J. GRASSO (1961) Measuring coliforms in water. Water Sewage Works. 108:238 -241

· GRABOW, W.O.K. & M. du Preez. (1979) Comparison of m-Endo LES, McConkey and Teepol media for membrane filtration counting of total coliform bacteria in water. Appl. Environ. Microbiol. 38:351-356.


## Storage conditions

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 ºC to 30 ºC).

## Ordering information

84645.0500 m-Endo LES agar Bulk of 500 g.

Note: For supplements see the section - Instructions for preparation.


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