

RTA.KK.669 Revision Date/Revision Number:-/0 Issue Date: 15.03.2016

# MEMBRAN FILTRATION KIT M- ENDO BROTH 3,6 CYROVIAL

#### **INTENDED USE:**

m-Endo Broth is used for enumerating coliforms in water by the membrane filtration method in a laboratory setting. Membrane filter technique is more convenient to work with high volume samples and count as well as conventional procedures.

#### PRINCIPLE AND INTERPRETATION:

Membrane filter technique is an effective, accepted technique for testing fluid samples for microbiological contamination. It involves less preparation than many traditional methods, and is one of a few methods that will allow the isolation and enumeration of microorganisms.

The coliform group are used as indicators of fecal pollution in water, for assessing the effectiveness of water treatment and disinfection, and for monitoring water quality. m-Endo Broth is used for selectively isolating coliform bacteria from water and other specimens using the membrane filtration technique.

## **TEST PROCEDURE:**

**Sample Volume** : A sample volume of 50 to 100 ml should be selected.

## Filtration Technique

- 1. The filter set body is sterilized in an autoclave at 121 oC for 15-30 minutes and the filter assembly is installed.
- **2.** Membrane filter is taken from the sterile pack with a sterile clamp.
- **3.** Carefully placed in the container with the checkered side of the filter on top.
- **4.** Turn on the vacuum and allow the sample to draw completely through the filter.
- **5.** While the filtration is in progress, the 60 mm petri dish with sterile pad opens.
- **6.** 3.6 ml of m-Endo Broth are poured into the petri dish.
- 7. After the filtration process is finished, the membrane filter is taken carefully with the help of a sterile pliers.
- **8.** Place the membrane filter into the prepared Petri dish.
- **9.** Incubate at the proper temperature and for the appropriate time period.

# COMPOSITION OF BROTH:

Ingredients	Gr/Liter
Lactose	12.5 gr
Enzymatic Digest of Soy Flour	10.0 gr
Enzymatic Digest of Animal Tissue	5.0 gr
Enzymatic Digest of Casein	5.0 gr
Sodium Chloride	5.0 gr
Potassium Phosphate, dibasic	4.375 gr
Potassium Phosphate, monobasic	1.375 gr
Sodium Sulfite	2.1 gr
Yeast Extract	1.5 gr
Sodium Lauryl Sulfate	0.5 gr
Sodium Deoxycholate	0.1 gr
Basic Fuchsin	1.05 gr
Ethanol	20 ml

<sup>\*\*\*</sup>Formula adjusted, standardized to suit performance parameters

**pH**:  $7,2 \pm 0,2$ 

# **QUALITY CONTROL OF MEDIA:**

# 1.Sterility Control:

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

## 2.Phsical/Chemical Control

pH:  $7.2 \pm 0.2$  Apperance: Pink



## **Technical Data Sheet**

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3.Microbiological Control: Incubation at 35± 2 °C during 24 h

Microorganism	Inoculum	Results	
	(CFU)	Growth	Reaction
E.coli ATCC 25922	10-100	Good	Reddish colonies
Salmonella typhimurium ATCC 14028	10-100	Good	Colourless, pink
S.aureus ATCC 25923	100-1000	Inhibition	Inhibition

## PRECAUTIONS:

For professional use only. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

## STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C. Use before expiry date on the label. Do not use beyond stated expiry date.

### **DISPOSAL:**

Incubated prepared medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected plate should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

#### **PACKAGING:**

Katalog Number: 06257

Packaging:Box

Content: 100 cyrovial, 100 membran filters and petri dishes with pad/each box

#### **REFERENCES:**

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- 3. Downes, F. P., and K. Ito (eds.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
- 4. Bordner, R., and J. Winter (eds.). 1978. Microbiological methods for monitoring the environment, water, wastes. EPA-600/8-78-017. Environmental Monitoring and Support Laboratory, Office of Research and Development, U. S. Environmental Protection Agency, Cincinnati, OH.
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