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MEMBRAN FILTRATION KIT
M- CETRIMIDE AGAR

INTENDED USE:
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.

Cetrimide is a quarternary ammonium compound with bactericidal activity against a broad range of Gram-positive organisms and some Gram-negative organisms.

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. After the filtration process is finished, the membrane filter is taken carefully with the help of a sterile pliers.
6. Place the membrane filter into the prepared Petri dish.
7. Incubate at the proper temperature and for the appropriate time period.

COMPOSITION OF MEDIA:

Ingredients	Gr/Liter
Gelatin peptone	20 gr
Magnesium Chloride	1,4 gr
Potassium Sulphate	10 gr
Cetrimide	0,3
Agar	13,6 gr

***Formula adjusted, standardized to suit performance parameters

pH: 7,2 ± 0,2

QUALITY CONTROL OF MEDIA:
1.Sterility Control:
Incubation 48 hours at 30-35ºC and 72 hours at 20-25ºC: NO GROWTH

2.Phsical/Chemical Control
pH: 7,2 ± 0,2
Apperance: Light amber, opalescent, with precipitate

3.Microbiological Control: Incubation at 35± 2 ºC during 24-48 h

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Pseudomonas aeruginosa ATCC 9027	10-100	Good	Green-Yellow
Pseudomonas aeruginosa ATCC 27853	10-100	Good	Green-Brown
E.coli ATCC 25922	100-1000	Partial inhibition	Partial inhibition
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: 06217
Packaging: Box
Content: 100 plates and 100 membran filters/each package

REFERENCES:

1. The United States Pharmacopeial Convention. 2008. The United States Pharmacopeia 31/National Formulary 26 – 2008. United States Pharmacopeial Convention, Rockville, Md.
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4. King, E.O, M.K. Ward and D.E. Raney. 1954. Two simple media for the demonstration of pyocyanin and fluorescin. J. Lab. Clin. Med. 44:301-7.
5. Lowbury, E.J. 1951. Improved culture methods for the detection of Pseudomonas pyocyanea. J. Clin. Pathol. 4:66-72.
6. Lowbury, E.J. and A.G. Collins. 1955. The use of a new cetrimide product in a selective medium for Pseudomonas pyocyanea. J. Clin. Pathol. 8:47-8.
7. Brown, V.I. and E.J. Lowbury. 1965. Use of an improved cetrimide agar medium and other culture methods for Pseudomonas aeruginosa. J. Clin. Pathol. 18:752-6.