

## Bile Esculin Azide Medium (with Sterile Membrane Filter) MF004F

For detection and enumeration of Enterococci. It is recommended for use in Water (ISO 7899-2, 1984), food and other samples.

### Composition\*\*

Proprietary

### Directions

The test sample should be filtered through a sterile membrane filter having pore size of 0.45µ. Rehydrate the nutrient pad with 2.0 - 2.5 ml sterile distilled / purified water. After filtration, remove the membrane filter aseptically using sterile forceps. Place the membrane filter on rehydrated nutrient pad. Incubate the inoculated nutrient. Interpret the results qualitatively by observing the presence or absence of growth and quantitatively by counting the number of colonies on the surface of the membrane filter and calculating CFU/ml.

### Principle And Interpretation

DriFilter Membrane Nutrient Pad Medium are ready to use sterile culture media in the form of a 50 mm biological inert absorbent pads impregnated with standard culture medium, then dried and sterilized in 55 mm petri plate. They eliminate the need of laborious media preparation and autoclaving procedures. The nutrient pads are to be just rewetted with sterile distilled water and are ready to use. Use of nutrient pads allows larger sample volumes to be tested at a time. Interpretation of results is directly by counting the CFUs and also quantifies the microbial load present in the sample. Bile Esculin Agar was formulated by Swan (1) and evaluated by Facklam and Moody (2). Bile Esculin Azide Agar is modification of Bile Esculin Agar as per Isenberg (3). These media are selective and provide rapid growth of Group D *Streptococci*. These are highly nutritious media because of presence of casein enzymic hydrolysate, peptic digest of animal tissue and yeast extract. Sodium azide inhibits growth of gram-negative organisms and permits the cultivation of faecal *Streptococci*. Esculin hydrolysis and bile tolerance permit isolation and identification of group D *Streptococci* in 24 hours.

### Quality Control

#### Appearance

Dry filter membrane pad of 50mm diameter

#### Colour

Pale coloured nutrient pad

#### Sterility test

Passes release criteria

#### Cultural response

Cultural characteristics observed after incubation at 35-37°C for 18-24 hours

Organism	Growth	Esculin hydrolysis
<i>Enterococcus faecalis</i> ATCC 29212	Luxuriant	Positive (Blackening of nutrient membrane)
<i>Staphylococcus aureus</i> ATCC 25923	Good	Negative(no change)
<i>Proteus mirabilis</i> ATCC 25933	Good	Negative(no change)
<i>Streptococcus pyogenes</i> ATCC 19615	None-poor	Negative(no change)

## Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

## Reference

1. Swan, 1954, J. Clin. Pathol., 7:160. 2. Facklam R. R and Moody M. D., 1970, Appl. Microbiol., 20(2):245. 3. Isenberg, 1970, Clin. Lab. Forum, July.



### Disclaimer :

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