

# EMB (Eosin Methylene Blue) Broth



Medium used for the isolation and cultivation of Gram-negative enteric bacteria.

## • CONTENTS (Liter)

Peptic Digest of Animal Tissue	10.0 g
Lactose	5.0 g
Sucrose	5.0 g
Dipotassium Phosphate	2.0 g
Eosin Y	0.4 g
Methylene Blue	0.065 g
Final pH = 7.2 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 22.47 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

## • INTERPRETATION

EMB (Eosin Methylene Blue) Broth is a medium used for the isolation and cultivation of Gram-negative enteric bacteria. Peptic digest of animal tissue provides carbon, nitrogen, vitamins and minerals. Lactose and sucrose are fermentable carbohydrate sources. Dipotassium phosphate is the buffering agent. Eosin Y and methylene blue serve as differential indicators.

## • TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 36 ± 1°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light pink

### Prepared medium

Appearance : opalescent

Color: reddish-purple with greenish tint

Incubation conditions: 36 ± 1°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	25922	50-100	good	purple with metallic sheen
<i>Enterobacter aerogenes</i>	13048	50-100	good	-
<i>Salmonella typhimurium</i>	14028	50-100	good	-
<i>Staphylococcus aureus</i>	25923	≥10 <sup>3</sup>	inhibited	-

**• STORE**

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

**• REFERENCES**

1. Holt-Harris, J.E., and O. Teague. (1916). A new culture medium for isolation of *Bacillus typhosa* from stools. *J. Infect. Dis.* 18:596-600.
2. Howard B.J., 1994, *Clinical and Pathogenic Microbiology*, 2nd ed., Mosby Year Book, Inc.

**• PACKAGE**

Cat. No : MB-E0912 EMB (Eosin Methylene Blue) Broth	500 G
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