

MM0110

EMB agar (Eosin Methylene Blue Agar, Levine)

Use and description:

This medium is used for isolation and differentiation of lactose fermenting coliforms. Eosin inhibits enterococci. *Escherichia coli* produces high amount of acid due to lactose fermentation which causes amide bond between eosin and methylene blue that gives metallic shine to its colonies. Medium is light sensitive.

Composition per liter:

Peptones.....	10.0 g
Agar.....	15.0 g
Lactose.....	10.0 g
Dipotassium hydrogen phosphate.....	2.0 g
Eosin Yellow.....	0.4 g
Methylene blue.....	0.065 g

Final pH of the ready to use medium: 6.8 +/- 0.2

Medium preparation:

Add 37.5 grams of dehydrated culture medium to 1 liter of distilled water. Autoclave for 15 min at 121°C. Cool to 45-50°C, homogenize perfectly and pour into Petri dishes. Needs 24 hours aging before use. Store in the dark due it is light sensitive..

Quality specifications:

Dehydrated medium: homogeneous, light violet fine powder.

Ready to use medium: Clear, dark brownish-violet medium

Microbiological response:

Organism	Result
<i>Escherichia coli</i> ATCC 25922	Growth
<i>Enterobacter aerogenes</i> ATCC 13048	Growth
<i>Proteus vulgaris</i> ATCC 13315	Growth
<i>Staphylococcus aureus</i> ATCC 25923	Inhibited

Storage:

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or if the color has changed from the original.

**For references please turn appendix 1.
For supplement details please turn appendix 2.**