

**MM0250**

## EC Broth

### **Use and description:**

EC Broth is recommended for the selective enumeration of presumptive *Escherichia coli* by MPN technique.

This medium is selective for *Escherichia coli*. Due to its reduced bile salts content, it can be used for direct enrichment of *E. coli* from food and environmental samples, for damaged organisms. The usage of novobycin supplement (20 mg/l) increases the selectivity and inhibits several sensitive bacterial strains.

### **Composition per liter g/l :**

Casein enzymic hydrolysate 20.000  
Lactose 5.000  
Bile salts mixture 1.500  
Dipotassium phosphate 4.000  
Monopotassium phosphate 1.500  
Sodium chloride 5.000

**Final pH of the ready to use medium:** 6.9 ± 0.2

### **Medium preparation:**

Suspend 37 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense in test tubes containing inverted Durhams tube. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Adjust the concentration of medium in accordance with sample size.

### **Quality specifications:**

Dehydrated medium: cream to yellow powder.

Ready to use medium: yellow clear solution

### **Microbiological response after incubation at 44.5°C ± 0.2 for 24 hours:**

Bacillus subtilis ATCC 6633	>=10 <sup>3</sup>	inhibited	
Escherichia coli ATCC 25922	50-100	good-luxuriant	positive reaction
Enterobacter aerogenes ATCC 13048	>=10 <sup>3</sup>	inhibited	
Enterococcus faecalis ATCC 29212	>=10 <sup>3</sup>	inhibited	
Klebsiella pneumoniae ATCC 13883	50-100	good-luxuriant	positive reaction
Pseudomonas aeruginosa ATCC 27853	50-100	fair to good	negative reaction

### **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 the color has changed from the original.