

PRODUCT INFORMATION

EC Medium

Cat. No. E05-100



Date of Issue:
10/01/17

DESCRIPTION

EC Medium, otherwise known as EC Broth, is used to detect the presence of coliform bacteria in water, wastewater, and foods. Developed by Hajna and Perry, it was designed to detect coliform bacteria, specifically *E. coli*. A buffered lactose broth, it contains bile salts to inhibit gram-positive bacteria and spore forming microorganisms. Coliforms can be detected by growth at 37°C while *Escherichia coli* are detected by growth at 44.5°C. Dipotassium Phosphate and Monopotassium Phosphate act as buffering agents while Sodium Chloride maintains the osmotic balance of the medium.

Formula* per Liter:

Casein Digest of Peptone	20.0g
Sodium Chloride	5.0g
Monopotassium Phosphate	1.5g
Lactose	5.0g
Bile Salts #3	1.5g
Dipotassium Phosphate	4.0g

Final pH: 6.9 ± 0.2 at 25°C

** Grams per liter may be adjusted or formula supplemented to obtain desired performance.*

PREPARATION

Mix 37 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring to dissolve completely. Distribute into test tubes containing inverted fermentation Durham tubes and autoclave at 121°C for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogeneous, free flowing and light beige.
2. Visually the prepared medium is brilliant to gold and clear with little or no precipitate.
3. Expected cultural response after 24-26 hours at 44.5°C.

Microorganism	Result	Gas
<i>Escherichia coli</i> ATCC 25922	Growth	+
<i>Escherichia coli</i> ATCC 11775	Growth	+
<i>Enterococcus faecalis</i> ATCC 29212	Inhibition	-

STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.