EC BROTH MUG

For the detection of *Escherichia coli* in waters and foodstuff

Typical formula (g/l)

Tryptone	20.0
Lactose	5.0
Dipotassium Hydrogen Phosphate	4.0
Potassium Dihydrogen Phosphate	1.5
Sodium Chloride	5.0
Bile Salts n° 3	1.5
L-Tryptophan	1.0
MUG	50.0 mg

Directions

Suspend 38g in 1000 ml of cold distilled water, heat to dissolve, distribute into fermentation tubes and sterilise at 121°C for 15 minutes. Inoculate not more than 1ml of sample in 10ml of medium, or use multiple strength medium.
Final pH 6.9 ± 0.2

Description and technique

EC Broth is prepared according to the formulation proposed by Hajna and Perry and reported by APHA, and ISO 7251. EC Broth is a lactose buffered broth, with tryptophan for the optimisation of direct indole test, with MUG for the fluorogenic procedure for the detection of *E.coli* and with bile salts to obtain the inhibition of Gram-positive cocci and spore-forming organisms, which are often responsible for false positive results in Lactose Broth or Lauryl Sulphate Broth. The medium is recommended by FDA BAM for the detection of E.coli in shellfish. Follow standard methods for the test being performed. Observe the medium periodically for fluorescence development under Wood's lamp (366 nm).

User quality assurance (37°C - 24 h)
Productivity control
E.coli ATCC 25922: growth, gas production, fluorescent under Wood's lamp
Selectivity control
E.aerogenes: partially inhibited, no fluorescence under Wood's lamp
Storage
Dehydrated medium: 2-8°C
User prepared tubes: 1 month at 2-8°C

Reference

• FDA (1995) Bacteriological Analytical Manual, 8th ed. Revision A, 1998. Published by AOAC International.

Packaging

4014261	**EC Broth MUG,**	**100 g (2.7 l)**
4014262	**EC Broth MUG,**	**500 g (13.5 l)**