

TM 2059 – EC0157:H7 ENRICHMENT BROTH

INTENDED USE

Recommended as an enrichment broth for the rapid growth of *E. coli* O157:H7 from food samples.

PRODUCT SUMMARY AND EXPLANATION

E. coli O157:H7 is a cause of food borne disease in the health industry. Most of the illnesses are associated with eating undercooked, contaminated ground beef; however, contaminated fruits and vegetables are currently increasingly implicated as sources of *E. coli* O157:H7 infections. The major concern is the outbreak of *E. coli* O157:H7 food poisoning in United States and Japan. *E. coli* O157:H7 has been recognized as a cause of haemorrhagic colitis. EC0157:H7 Enrichment broth is based on the formulation described by Rappaport and Henigh. EC0157:H7 Enrichment Broth was designed for the rapid enrichment of *E. Coli* O157: H7.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	15.000
Yeast extract	6.000
Bile salts mixture	1.500

PRINCIPLE

The medium consists of Tryptone which provides nitrogenous, carbonaceous compounds and other essential growth nutrients. Yeast extract serves as a source of vitamin B complex and other nutrients. Bile salt mixture inhibits most of the gram-positive organisms.

INSTRUCTION FOR USE

- Dissolve 22.5 grams in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense into sterile test tubes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber clear solution without any precipitate.
pH (at 25°C)	: 7.1 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	Strains	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period



<i>Escherichia coli</i>	25922 ATCC	50-100	Luxuriant	35-37°C	4-6 Hours
<i>Escherichia coli</i> O157:H7	12900 NCTC	50-100	Luxuriant	35-37°C	4-6 Hours
<i>Cronobacter sakazakii</i>	12868 ATCC	50-100	Luxuriant	35-37°C	4-6 Hours
<i>Klebsiella pneumoniae</i>	13883 ATCC	50-100	Luxuriant	35-37°C	4-6 Hours
<i>Salmonella</i> Enteritidis	13076 ATCC	50-100	Luxuriant	35-37°C	4-6 Hours
<i>Enterococcus faecalis</i>	29212 ATCC	$\geq 10^3$	Inhibited	35-37°C	4-6 Hours
<i>Staphylococcus aureus</i>	25923 ATCC	$\geq 10^3$	Inhibited	35-37°C	4-6 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.







DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Ackers, M. L., B. E. Mahon, E. Leahy, B. Goode, T. Damrow, P. S. Hayes, W. F. Bibb, D. H. Rice, T. J. Barrett, L. Hutwagner, P. M. Griffin, and L. Slutsker. 1998. An outbreak of O157:H7 infections associated with leaf lettuce consumption. J. Infect. Dis. 177:1588-1593.
2. Rappaport F and Henigh E., J. Clin. Path., 5:361.
3. Karmali M. A., Petric M., Lim C., et al, 1985, J. Infect. Dis., 151:775.



GMP Good Manufacturing Practices Certified	IVD For In Vitro Diagnostic Use	QTY. Quantity	LOT/ B. NO. Lot / Batch Number	REF Catalogue Number	 Manufacturer
 Temperature Unit	EC REP MedNet GmbH Bauklotze 10, 49163 Moenster, Germany Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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