CM 20626 – 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.coli0157:H7 isacause of foodborne diseasein 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 0157:H7 food poisoning in United States and Japan. E. coli 0157: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 0157: H7.

COMPOSITION

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

PRINCIPLE

Themedium 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 22.5grams 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

Culturalcharacteristics observed after incubation.

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

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

PACKAGING:

Inpacksizeof500 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.

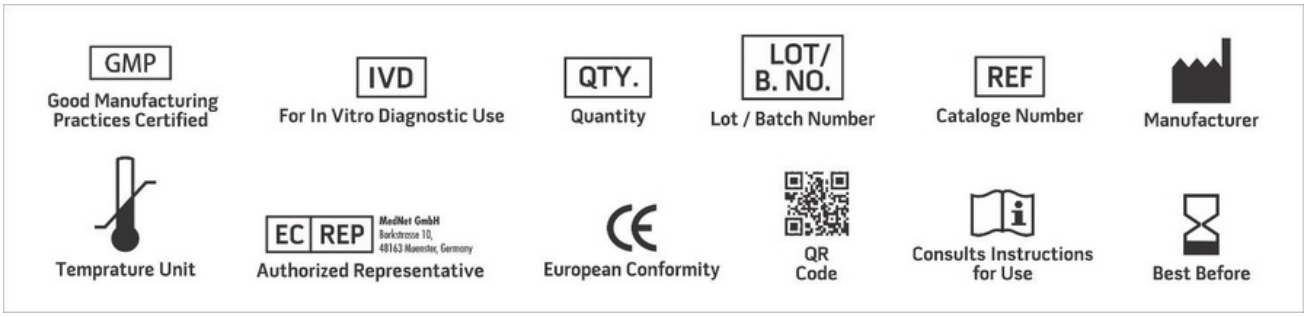
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

Afteruse,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. 1771588-1593.
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.



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

*For LabUse Only