TM 512 – TRYPTONE PHOSPHATE BROTH

INTENDED USE
For cultivation of enteropathogenic *Escherichia coli* from foods.

PRODUCT SUMMARY AND EXPLANATION
Certain biotypes of Escherichia coli are etiological agents of gastrointestinal illness in humans and several mammals. These enteric diseases are characterized by fever, vomitting and prominent and watery diarrhea, usually with mucus but not blood. Enteropathogenic *E.coli* serotypes have been shown to be important causes of infantile diarrhoea. Tryptone Phosphate Broth is formulated as recommended by APHA for the enrichment of Enteropathogenic *E. coli.* . Refrigerate perishable material less than 1 day to avoid damages to the bacteria. Aseptically weigh 25 grams test portion into 225 ml Brain Heart Infusion Broth. Agitate gently, and incubate for 2 hours at 35°C. After incubation, streak loopful on MacConkey Agar and on EMB Agar. Incubate at 35°C for 2 hours. Pour the supernatant into 250 ml double strength Tryptone Phosphate Broth. Incubate at 44°C for 20±2 hours. Subsequently streak on EMB Agar and MacConkey Agar. Tryptone Phosphate Broth helps to enrich the stressed bacteria, if present.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	20.000
Dipotassium phosphate	2.000
Monopotassium phosphate	2.000
Sodium chloride	5.000
Polysorbate 80	1.500

PRINCIPLE
Casein enzymic hydrolysate serves as a good source of nitrogen. Polysorbate 80 is the fatty acid source required for bacterial metabolism. The inorganic phosphates serve as the buffer while sodium chloride maintains the osmotic balance. Examine test samples as promptly as possible after receipt

INSTRUCTION FOR USE
- Suspend 30.5 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in 100 ml aliquotes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured clear solution without any precipitate.
pH (at 25°C) : 7.0±0.2

INTERPRETATION
Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU)	Growth	Incubation Temperature	Incubation Period

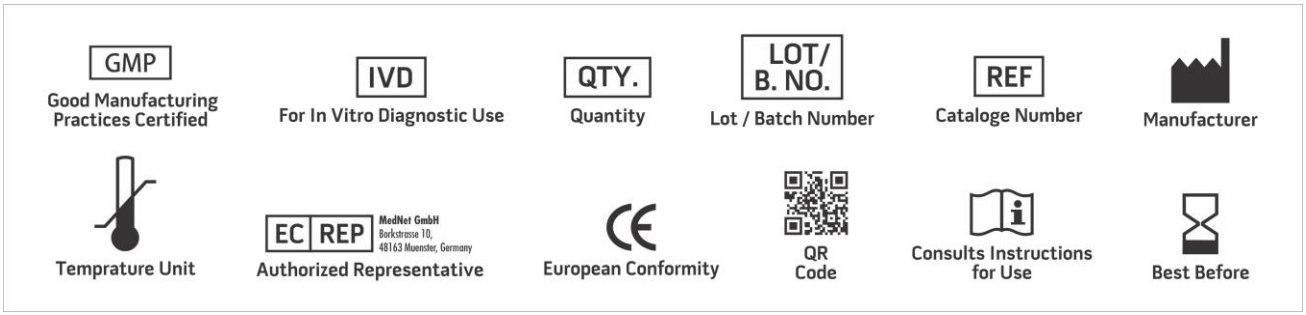
Escherichia coli	25922	50-100	Good- luxuriant	44°C	18-24 Hours

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. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
2. Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., American Public Health Association, Washington, D.C.
3. Levin M. M., 1987, J. Infect. Dis. 155: 377.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
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