

TM 924 - YERSINIA ENRICHMENT BROTH BASE

INTENDED USE

For enrichment of *Yersinia* species, particularly *Yersinia enterocolitica*.

PRODUCT SUMMARY AND EXPLANATION

Yersinia enterocolitica and related species *Yersinia intermedia*, *Yersinia frederiksenii* and *Yersinia kristensenii* constitute a heterologous group of organisms, some of which are parasites and potential pathogens of humans and animals, while others are apparently saprophytic and free living in water, soil and vegetation. *Y. enterocolitica* has been isolated from humans with a variety of clinical symptoms ranging from mild gastroenteritis, appendicitis and terminal ileitis. *Yersinia* has also been isolated from many animal species throughout the world. Human infections probably occur from ingestion of contaminated food products or animal contact. Family and other small outbreaks suggest that person to person transmission occurs.

Yersinia is relatively sensitive to acidic conditions; therefore, acid foods and fermented products should be analyzed promptly. The most efficient procedure for recovering enteropathogenic bacteria from foods incorporates at least one and often two enrichment steps before plating onto selective differential agar media. *Yersinia* Enrichment Broth Base is recommended as an enrichment broth for *Yersinia* species. The diagnosis is confirmed by direct isolation of the organisms on solid medium from enrichment broth.

COMPOSITION

Ingredients	Gms / Ltr
Casein peptone	10.000
Yeast extract	1.000
Disodium hydrogen phosphate	2.000
Malachite green	0.013

PRINCIPLE

Yersinia Enrichment Broth Base contains Casein peptone and yeast extract providing necessary nutrients for growth of *Yersinia*. It has disodium hydrogen phosphate acting as buffer salt. Malachite green in the medium inhibits other contaminating bacteria.

INSTRUCTION FOR USE

- Dissolve 13.01 grams in 1000 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Mix well and dispense in tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to light blue homogeneous free flowing powder.
Appearance of prepared medium	: Greenish blue coloured clear to slightly opalescent solution with a slight precipitate.
pH (at 25°C)	: 5.8±0.2

INTERPRETATION

Cultural characteristics observed with added chlortetracycline Selective supplement after an incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	$\geq 10^3$	Inhibited	25- 30°C	24-48 Hours
<i>Yersinia enterocolitica</i>	27729	50-100	Good-luxuriant	20-25°C	48-72 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 2-8°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. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. Collee J. G., Duguid J. P., Fraser A. G., Marmion B. P., (Eds.), Mackie and McCartney, Practical Medical Microbiology, 1989, 13th Edition, Churchill Livingstone.
3. 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.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. Wauters G., 1973: Med. Mald. Infect. 3 :437.

 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 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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