

TM 2128 - LISTERIA ENRICHMENT BROTH BASE

INTENDED USE

Recommended for the rapid and selective enrichment of *Listeria* species from food samples in 24 hours

PRODUCT SUMMARY AND EXPLANATION

Listeria Enrichment Broth Base is recommended for selective enrichment of *Listeria* species from food samples. This medium contains peptone and carbohydrate mixture which provide essential nutrients like carbon and nitrogenous compounds including vitamins, long chain amino acids and trace ingredients. Being nutritionally rich, the medium supports rapid growth of microorganisms in 18-24 hours. Salt mix helps in buffering the medium. The selective supplement added to the medium helps in inhibiting the non-target organism. It can be used as a selective enrichment medium prior to plating on a selective or chromogenic medium for *Listeria*.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	28.000
Salt mix	10.000
Carbohydrate mixture	6.000

PRINCIPLE

Listeria species are widely distributed and are isolated from soil, decaying vegetable matter, sewage, water, animal feed, fresh and frozen poultry, meats, raw milk, cheese and asymptomatic human and animal carriers. Only *Listeria monocytogenes* from the genus *Listeria*; causes infections in humans. *L. monocytogenes* primarily causes meningitis, encephalitis or septicemia in humans. In pregnant women, *Listeria monocytogenes* often causes an influenza like bacteremic illness that, if untreated, may lead to amnionitis and infection of the fetus, resulting in abortion, still birth or premature birth. Contaminated foods are the primary vehicles of transmission.

INSTRUCTION FOR USE

- Suspend 44.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15lbs pressure (121°C) for 15 minutes.
- Cool to 45-50°C. Aseptically add the rehydrated contents of one vial of Rapid *Listeria* Selective Supplement (TS 288).
- Mix well and dispense in sterile tubes or flasks as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Yellow coloured clear solution.

pH (at 25 °C) : 7.4±0.2

INTERPRETATION



Cultural characteristics observed when subcultured on Soyabean Casein digest Agar, after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Recovery	Incubation Temperature	Incubation Period
<i>Staphylococcus aureus</i>	25923	$\geq 10^4$	Inhibited	30-35°C	22-26 Hours
<i>Listeria monocytogenes</i>	19111	50-100	Good-luxuriant	30-35°C	22-26 Hours
<i>Listeria monocytogenes</i>	7644	50-100	Good-luxuriant	30-35°C	22-26 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 10-25°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. The complete medium is unstable and should be used immediately.

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

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- Kauffman F., 1935, Ztschr. F. Hyg., 117:26.
- International Organization for Standardization, 1974, (Draft International Standard ISO/DIS 3565), Geneva, Switzerland.
- Public Health Laboratory Service, 1974, Monograph Series No. 8, Public Health Laboratory Service, London, England.
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- Speck M. L., (Ed.), 1984, Compendium of Methods for the Microbiological Examination of Foods, 2nd Ed., American Public Health Association, Washington, D.C.
- DAoust J. Y., 1989, Salmonella in Food borne Bacterial pathogens, (Eds.) Doyle M. P., 327, Marcel Dekker, New York.
- International Organization for Standardization (ISO), 2002, Draft 6579.



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 <small>MedNet GmbH Buckstrasse 10, 48163 Münster, Germany</small>	 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**
Revision: 28 June., 2023