

CM 21572 - SALT POLYMYXIN BROTH BASE

INTENDED USE

For detection and enumeration of *Vibrio* species.

PRODUCT SUMMARY AND EXPLANATION

Vibrios are fairly easy to isolate from both clinical and environmental material, though some species may require growth factors and /or vitamins. Salt Polymyxin Broth is formulated as per the recommendation of APHA.

Weigh 50 grams of sample into a blender. Add 450 ml phosphate buffer saline dilution water and blend for 1 minute at 8000 rpm. This constitutes 1:10 dilution. Prepare 1:100, 1:1000, 1:10000 dilutions or higher, if necessary, in PCB. Inoculate 3 x 10 ml portion of the 1: 10 dilutions into 3 tubes containing 10 ml of enrichment broth i.e. Salt Polymyxin Broth Base- 2x concentration. This represents the 1 gram portion. Similarly inoculate 3 x 1 ml of dilutions into 10 ml of single strength Salt Polymyxin Broth Base. Incubate tubes at 35 ± 2°C for 24 hours.

After incubation a loopful is subcultured on solid medium such as TCBS Agar for further studies. *V. parahaemolyticus* appears as round, green or bluish colonies, 2-3 mm in diameter while *V. cholerae* forms yellow coloured colonies.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	10.000
Yeast extract	3.000
Sodium chloride	20.000

PRINCIPLE

Casein enzymic hydrolysate and yeast extract provide nitrogenous compounds, carbon, sulphur, trace elements and vitamin B complex, essential for the growth. Polymyxin B sulphate inhibits gram-positive organisms.

INSTRUCTION FOR USE

Dissolve 16.5 grams in 500 ml distilled water.

Heat if necessary to dissolve the medium completely.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

Cool to 45 - 50°C and aseptically add rehydrated contents of 1 vial of Polymyxin B Selective Supplement.

Mix well and dispense as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured clear solution without any precipitate.
pH (at 25°C)	: 8.8 ± 0.2

INTERPRETATION

Cultural characteristics observed after an incubation with added Polymyxin B Selective Supplement.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
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Vibrio cholerae	14035	50-100	luxuriant	35-37°C	24-48 Hours
Vibrio parahaemolyticus	17802	50-100	luxuriant	35-37°C	24-48 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.

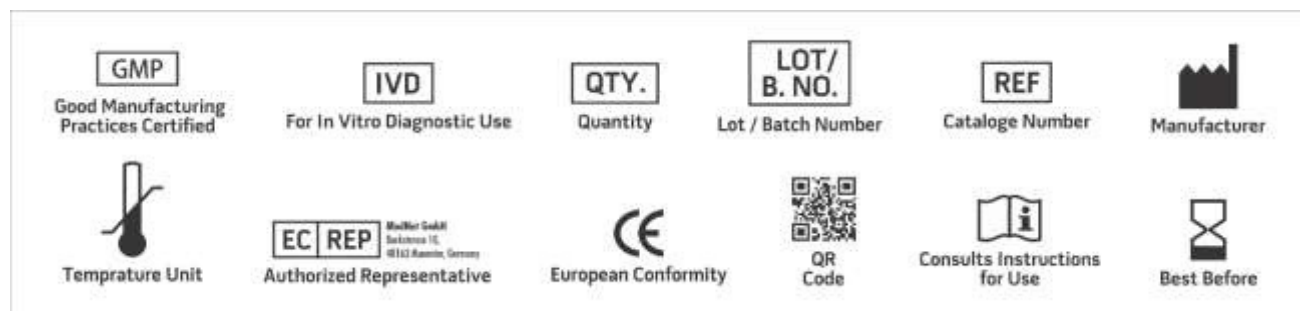
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Downes F.P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.



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

*For Lab Use Only