

TM 1878 -ALKALINE SALINE PEPTONE WATER (ASPW) (ISO 8261, ISO 7218, ISO 6887, ISO 21872-1&2:2007)

INTENDED USE

For enrichment of *Vibrio* species from food and water samples.

PRODUCT SUMMARY AND EXPLANATION

Alkaline Saline Peptone Water (ASPW) was first formulated by Shread, Donovan and Lee to be used as a non-selective enrichment broth for the cultivation of *Aeromonas* species. It is prepared in accordance with ISO/TS 21872-1:2007 which specifies a horizontal method for the detection of the two main pathogenic *Vibrio* species causing intestinal illness in humans: *V. parahaemolyticus* and *V. cholerae*. It is applicable to products intended for human consumption and the feeding of animals, and environmental samples in the area of food production and food handling.

COMPOSITION

Ingredients	Gms / Ltr
Sodium chloride	20.000
Peptone	20.000

PRINCIPLE

The peptone makes this media nutritious by providing amino acids and other nitrogenous substances for the growth of microorganisms. Sodium chloride maintains the osmotic balance. The medium uses elevated pH and salt levels to provide a favorable environment for enrichment of *Vibrio* species and also has an inhibitory action on the accompanying microflora.

INSTRUCTION FOR USE

- Dissolve 40 grams in 1000ml distilled water.
- Gently heat to boiling with gentle swirling to dissolve the medium completely.
- Dispense in tubes.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45-50°C before use.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Cream to yellow colour, Homogeneous free flowing powder
Appearance of Prepared medium	:	Light yellow colour, clear solution without any precipitate
pH (at 25°C)	:	8.6± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Vibrio cholerae</i>	15748	50-100	Luxuriant	35-37°C	18 – 24 Hours
<i>Vibrio parahaemolyticus</i>	17802	50-100	Luxuriant	35-37°C	18 – 24 Hours



PACKAGING

In 100 & 500 gm packaging size.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 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. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

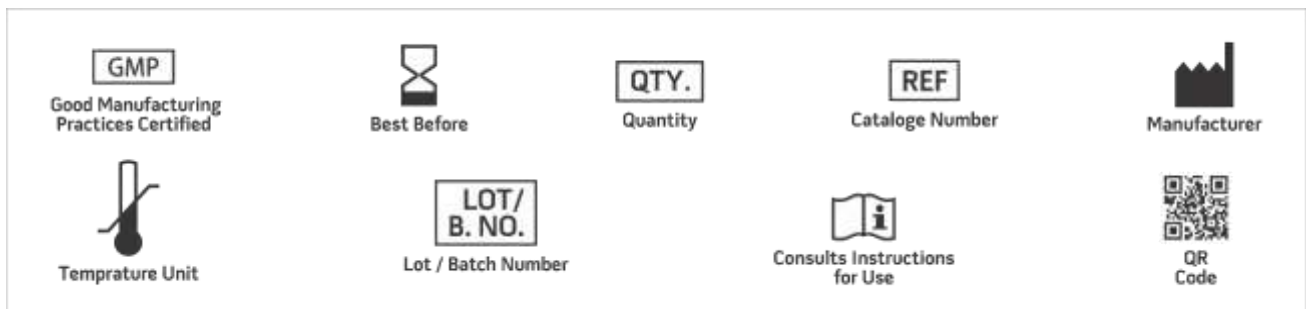
Product Deterioration: Do not use, if powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Madiga et al, 2005. Biology of Microorganisms, 11th ed, Prentice Hall.
2. Thompson et al (ed.). 2006. The Biology of Vibrios, ASM Press, chapter 1, pg 3.
3. Alcamo. E.I, 2001. Fundamentals of Microbiology, 6th ed, Jones and Bartlett Publishers, Inc. pg 254, 244.
4. Clesceri, Greenberg and Eaton (ed.). 1998. Standard Method for the examination of Water and Waste water, 20th ed. American Public Health Association, Washington, D. C.
5. ISO/TS 21872-1:2007. Horizontal method for the detection of the two main pathogenic *Vibrio* species causing intestinal illness in humans: *V. parahaemolyticus* and *V. cholerae*.
6. Shread P., Donovan T. J., and Lee J. V. (1991) Soc. Gen. Microbiol. Q. 8:184



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

***For Lab Use Only**

Revision: 30th Nov 2023