

TM 1192 - GELATIN PHOSPHATE BUFFER

INTENDED USE

For detection of toxin in food products suspected with *Clostridium botulinum*.

PRODUCT SUMMARY AND EXPLANATION

Gelatin phosphate buffer is used in toxin detection. Botulinum toxin (botox) types A-G are produced by heterogeneous strains of *Clostridium botulinum*. Botox types A, B, E and F have caused serious and sometimes fatal, cases of food borne illness in humans. The vast majority of botulinum outbreaks in red meat and poultry products have involved either toxin A or B.

COMPOSITION

Ingredients	Gms / Ltr
Sodium dihydrogen phosphate	4.000
Gelatin	2.000

PRINCIPLE

The current botulinum toxin test method is the mouse bioassay procedure. Gelatin Phosphate Buffer is one of the reagent used in this test method.

INSTRUCTION FOR USE

- Dissolve 6.0 grams in 1000 ml purified / distilled water.
- Boil to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow coloured homogeneous coarse powder.
Appearance of prepared medium : Colourless clear solution forms in tubes.
pH (at 25°C) : 6.2±0.1

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Gelatinase reaction	Incubation Temperature	Incubation Period
<i>Clostridium botulinum</i>	25763	50-100	Good	Positive reaction	35-37°C	24-48 Hours

PACKAGING:

In pack size of 100 gm and 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.

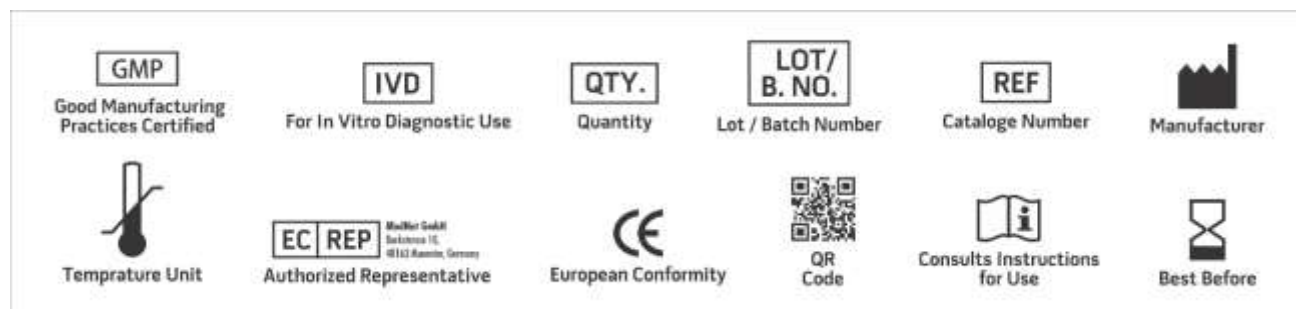
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
2. 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.
3. L. Victor Cook, Wei Hwa, Charles P. Lattuade and Gerri M. Ransom Methods for the detection of *Clostridium botulinum* toxins in meat and poultry products. USDA/FSIS Microbiology Laboratory Guidebook, 3rd edition, Chapter 14, 1998.
4. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.



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

***For Lab Use Only**
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