

TM 1052 – NEUTRALISING BUFFER

INTENDED USE

For detection of microorganisms on dairy and food equipments disinfected with chlorine or quaternary ammonium compounds.

PRODUCT SUMMARY AND EXPLANATION

Neutralizing buffers are used in the examination of dairy and food equipments for possible contamination of microorganisms. The buffer is generally used to inactivate the bactericidal and bacteriostatic effect of chlorine and quaternary ammonium compounds. It is also recommended by APHA for use in the microbiological examination of surfaces. Neutralizing buffer is also used in the digestion and decontamination of mycobacterial specimens.

COMPOSITION

Ingredients	Gms / Ltr
Monopotassium phosphate	0.0425
Sodium thiosulphate	0.160
Aryl sulphonate complex	5.009

PRINCIPLE

Monopotassium phosphate buffers the medium well. The aryl sulphonate complex neutralizes the effect of quaternary ammonium compounds while sodium thiosulphate inactivates the effect of chlorine compounds.

INSTRUCTION FOR USE

- Dissolve 5.20 grams in 1000 ml distilled water.
- Heat if necessary, 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	: White to cream homogeneous free flowing powder.
Appearance of prepared medium	: Colourless clear to slightly opalescent solution without significant precipitation
pH (at 25°C)	: 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation when subcultured on Tryptone Glucose Extract Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period

<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	35-37°C	18-24 Hours
<i>Salmonella Typhimurium</i>	14028	50-100	Luxuriant	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	25923	50-100	Luxuriant	35-37°C	18-24 Hours

PACKAGING:

In pack size of 100 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

- Downes F. P. and Ito K., (Ed.), 2001. Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA Inc. Washington D. C .
- Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
- Cernoch, Enns, Saubolle and Wallace, 1994, Cumitech 16A, Laboratory Diagnosis of the Mycobacterioses, Coord, (Ed.), Weissfeld, American Society for Microbiology, Washington, D.C.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

***For Lab Use Only**
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