TM 688 – BUFFERED TRYPTONE GLUCOSE YEAST EXTRACT BROTH

INTENDED USE

For cultivation and characterization of Clostridia isolated from food samples.

PRODUCT SUMMARY AND EXPLANATION

Clostridium perfringens food poisoning is one of the most common types of foodborne illness. A heat labile enterotoxin produced only by sporulating cells induces the major symptoms of diarrhoea in perfringens poisoning. Although the enterotoxin is not preformed in the food, the foods in which conditions are favorable for sporulation may contain enterotoxin. Buffered Tryptone Glucose Yeast Extract Broth is prepared as recommended by APHA for enrichment as well as for cultivation of Clostridia from food samples. Buffered Tryptone Glucose Yeast Extract Broth is also used to obtain pure cultures of Clostridia before proceeding for confirmation. Endospores are not usually produced in this medium.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	50.000
Peptone	5.000
Yeast extract	20.000
Dextrose (Glucose)	4.000
Disodium hydrogen phosphate	5.000
Sodium thioglycollate	1.000

PRINCIPLE

The medium contains tryptone, peptone and yeast extract, which provides carbon and nitrogen, vitamins and other essential nutrients. Dextrose is the fermentable sugar. Disodium phosphate buffers the medium well. Sodium thioglycollate present in the medium acts as a reducing agent and maintains a low oxygen tension in the medium.

INSTRUCTION FOR USE

- Dissolve 8.5 grams in 100 ml purified / distilled water.
- Heat, if necessary to dissolve the medium completely and dispense 15 ml into 20x150 mm test tubes or 100 ml in 170 ml bottles.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 8 minutes (tubes) or 15 minutes (bottles).

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured clear solution without any precipitate.
pH (at 25°C) : 7.3±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

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

Clostridium botulinum	25763	50-100	Good-luxuriant	35-37°C	18-48 Hours
Clostridium perfringens	12924	50-100	Good-luxuriant	35-37°C	18-48 Hours
Clostridium sporogenes	11437	50-100	Good-luxuriant	35-37°C	18-48 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
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5. 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.
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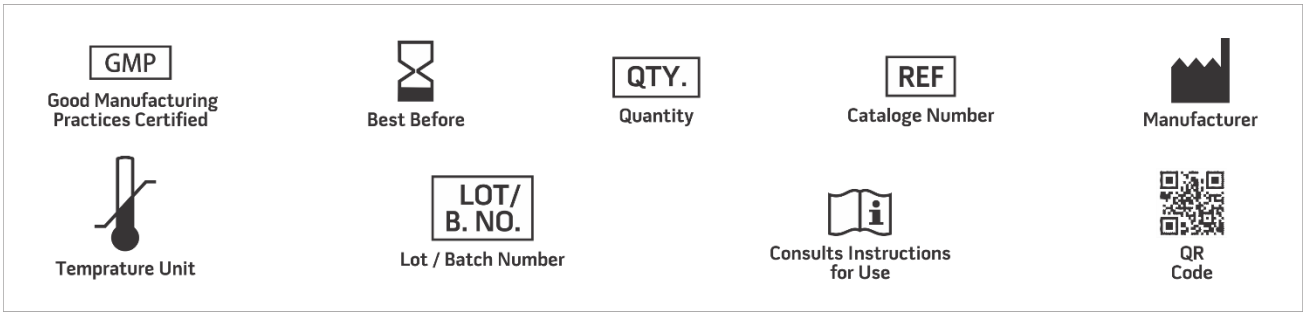

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
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