

TM 467 – TRYPTONE GLUCOSE YEAST EXTRACT BROTH (STANDARD **METHOD BROTH**

INTENDED USE

For enumeration of microorganisms from foods by MPN technique.

PRODUCT SUMMARY AND EXPLANATION

Tryptone Glucose Yeast Extract Broth is recommended by APHA for the enumeration of microorganisms during microbiological examination of food materials by MPN technique.

COMPOSITION

Ingredients	Gms / Ltr	
Casein enzymic hydrolysate	10.000	
Glucose	5.000	
Yeast extract	1.000	
Dipotassium phosphate	1.250	

PRINCIPLE

Casein enzymic hydrolysate, yeast extract provides nitrogenous compounds, vitamin B complex and other essential growth nutrients. Glucose is the energy source whereas dipotassium phosphate buffers the medium.

INSTRUCTION FOR USE

- Dissolve 17.25 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 in sterile test tubes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

: Light yellow coloured clear solution in tubes. Appearance of prepared medium

: 6.8±0.2 pH (at 25°C)

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Luxuriant	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	35-37°C	18-24 Hours











Enterobacter aerogenes	13048	50-100	Luxuriant	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	Luxuriant	35-37°C	18-24 Hours
Lactobacillus casei	9595	50-100	Luxuriant	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	35-37°C	18-24 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	35-37°C	18-24 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 Revision: 08 Nov., 2019





