

TMV 467 – TRYPTONE GLUCOSE YEAST EXTRACT BROTH (STANDARD METHOD BROTH) (VEG.)

INTENDED USE

For enumeration of microorganisms from foods by MPN technique.

PRODUCT SUMMARY AND EXPLANATION

These media are prepared by using Veg hydrolysate which is free from BSE/TSE risks associated with animal based peptones. These media are the modification of Tryptone Glucose Yeast Extract Agar/Broth which was originally developed by Bowers and Hucker. These media serves the same purpose as the conventional media which are recommended for the cultivation and enumeration of bacteria in air, water, milk and dairy products. Also these media can be used for various studies of thermophilic bacteria in milk, influence of incubation temperature etc. Tryptone Glucose Extract Veg Agar/Broth like the conventional medium are used for the bacteriological plate count of milk and dairy products and for the enumeration of microorganisms during microbiological examination of food materials by MPN technique.

This medium can be used for pour plate technique. Usually 1 ml of appropriate dilution of the test sample are pipetted in to sterile petriplates and molten, Tryptone Glucose Yeast Extract Veg Agar is added followed by gentle mixing to mix the sample well and incubate the plates for 48 –72 hours at 32 – 35°C.

COMPOSITION

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

PRINCIPLE

Veg hydrolysate, yeast extract provide nitrogenous compounds, vitamin B complex and other essential growth nutrients. Glucose is the energy source.

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	: Light yellow coloured, homogeneous, free flowing powder.
Appearance of prepared medium	: Light yellow coloured, clear to slightly opalescent gel forms in petri plates, clear solution in tubes.
pH (at 25°C)	: 6.8 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Bacillus subtilis</i>	6633	50-100	Luxuriant	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Luxuriant	35-37°C	18-24 Hours
<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant	35-37°C	18-24 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	35-37°C	18-24 Hours
<i>Lactobacillus casei</i>	9595	50-100	Luxuriant	35-37°C	18-24 Hours
<i>Pseudomonas aeruginosa</i>	27853	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 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. Bowers and Hucker, 1935, Tech. Bull., 228, N.Y.State Agr. Expt. Station.
2. Eaton A.D., Clesceri L.S. and Greenberg A.E., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st ed, APHA, Washington D.C.
3. Standard Methods for the Examination of Dairy Products. 17th Edition, 2004 Edited by H. Michael Wehr and Joseph H.Frank.
4. Pickett, 1928, Tech. Bull. 147, N.Y. State Agr. Expt. Station.
5. Dennis and Weiser, 1937, J.Dairy Science, 20 : 445.
6. Am. J. Pub. Health, 1939, 29 : 821.
7. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, 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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