

TMV 466 – TRYPTONE GLUCOSE YEAST EXTRACT AGAR (VEG.)

INTENDED USE

For enumeration of bacteria in water, air, milk and dairy products.

PRODUCT SUMMARY AND EXPLANATION

These media are prepared by using Veg hydrolysate which is free from BSE/TSE risks associated with animal based peptones. Tryptone Glucose Yeast Extract Agar was originally developed by Bowers and Hucker which they called as Tryptone Glucose Skim Milk Agar. Later on it was modified to the present composition for the cultivation and enumeration of bacteria in air, water, milk and dairy products. Various authors have studied different aspects of this medium like study of thermophilic bacteria in milk, influence of incubation temperature etc. It is used as a standard medium for the bacteriological plate count of milk and dairy products.

COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate	5.000
Yeast extract	3.000
Glucose	1.000
Agar	15.000

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 24 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

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)	: 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Bacillus subtilis</i> <i>subsp. spizizenii</i>	6633	50-100	Luxuriant	≥70%	35-37°C	18-48 Hours



<i>Escherichia coli</i>	25922	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-48 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-48 Hours
<i>Lactobacillus casei</i>	9595	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-48 Hours
<i>Pseudomonas aeruginosa</i>	27853	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-48 Hours
<i>Staphylococcus aureus</i> <i>subsp.aureus</i>	25923	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-48 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. 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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