

TMV 341 - NUTRIENT AGAR (VEG.)

INTENDED USE

For cultivation of less fastidious microorganisms, can be enriched with blood or other biological fluids.

PRODUCT SUMMARY AND EXPLANATION

Nutrient media are basic culture media used for maintaining microorganisms, cultivating fastidious organisms by enriching with serum or blood and are also used for purity checking prior to biochemical or serological testing. Nutrient Agar(Veg) is prepared by completely replacing animal based peptone with vegetable peptones to avoid BSE/TSE risks associated with animal peptones. It can be used for the cultivation and enumeration of bacteria which are not particularly fastidious. Addition of different biological fluids such as horse or sheep blood, serum, egg yolk etc. makes it suitable for the cultivation of related fastidious organisms.

COMPOSITION

Ingredients	Gms / Ltr	
Veg Peptone	5.000	
Sodium chloride	5.000	
Veg extract	1.500	
Yeast extract	1.500	
Agar	15.000	

PRINCIPLE

The medium consists of Veg Peptone, Veg extract and yeast extract that provide the necessary nitrogen compounds, carbon, vitamins and also some trace ingredients necessary for the growth of bacteria. Sodium chloride maintains the osmotic equilibrium of the medium.

INSTRUCTION FOR USE

- Dissolve 28.0 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- If desired, the medium can be enriched with 5-10% blood or other biological fluids.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing

powder.

Appearance of prepared medium: Light amber coloured, clear to slightly opalescent gel forms in petri plates.

pH (at 25°C) : 7.4 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.











Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Pseudomonas aeruginosa	27853	50-100	Good- luxuriant	>=50%	35-37°C	18-48 Hours
Staphylococcus aureus	25923	50-100	Good- luxuriant	>=50%	35-37°C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Good- luxuriant	>=50%	35-37°C	18-48 Hours
Escherichia coli	25922	50-100	Good- luxuriant	>=50%	35-37°C	18-48 Hours
Pseudomonas aeruginosa	27853	50-100	Good- luxuriant	>=50%	35-37°C	18-48 Hours
Salmonella Enteritidis	13076	50-100	Good- luxuriant	>=50%	35-37°C	18-48 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

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. Lapage S., Shelton J. and Mitchell T., 1970, 'Methods in Microbiology', Norris J. and Ribbons D. (Eds.), Vol. 3A., Academic Press, London.
- 2. MacFaddin J.F., 2000(ed), Biochemical Tests for Identification of Medical Bacteria, 3rd edition, Lippincott Williams and Wilkins, New York.







































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

Revision: 08 Nov., 2019







