

CM 21,308 – NUTRIENT AGAR 1.5% (VEG.)

INTENDED USE

For cultivation of bacteria requiring less nutrition, can be enriched with blood.

PRODUCT SUMMARY AND EXPLANATION

Nutrient Agar 1.5% is the modification of Nutrient Agar recommended by APHA for cultivation and maintenance of non-fastidious microorganisms. This medium is used as a general-purpose medium. This medium is prepared by completely replacing animal based peptones with vegetable peptones to avoid BSE/TSE risks associated with animal peptones. Recently ISO Committee has also recommended it with slight modification for sub cultivation of E.coli and coliforms from water samples.

COMPOSITION

Ingredients	Gms / Ltr
Veg Peptone	5.000
Veg extract	3.000
Sodium chloride	8.000
Agar	15.000

PRINCIPLE

The medium consists of Veg Peptone and veg extract that serves as a source of nitrogen and carbon source, long chain amino acids and other essential nutrients. Nutrient Agar 1.5% (Veg) may be used for blood culturing work after the addition of sterile 5-10% v/v defibrinated blood. Sodium chloride makes the medium isotonic preventing haemolysis of blood corpuscles.

INSTRUCTION FOR USE

Dissolve 31.0 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. If desired, it can be appropriately enriched with sterile blood, ascetic fluid or serum after cooling to 45-50°C.

Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder

Appearance of prepared medium : Yellow coloured clear gel forms in Petri plates. With the addition of blood
Cherry red coloured opaque gel forms in Petri plates.

pH (at 25°C) : 7.3 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Staphylococcus aureus	25922	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Escherichia coli	25923	50-100	Luxuriant	>=70%	35-37°C	18-24 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. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
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.
6. Water quality : Enumeration of E.coli and total coliforms, Part 1. International Organization for Standardization (ISO), 2014, Draft ISO/DIS 9308-1.
7. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For Lab Use Only

