

CM 21,299 – NUTRIENT AGAR (pH 6.8) (ISO 10273:2003, ISO 21528: 2004, ISO 19250:2010, ISO 6579:2015)

INTENDED USE

A general purpose nutrient medium for testing of water, sewage, faeces & other materials.

PRODUCT SUMMARY AND EXPLANATION

Nutrient Agar is a basic culture medium used for maintenance or to check purity of subcultures prior to biochemical or serological tests from water and Dairy. This medium may be used as slants or plates for routine work with non-fastidious organisms. Many bacteria have the optimum pH growth range of 6.6 to 7.0. Wetmore and Gochenour maintained cultures of *Malleomyces* and *Pseudomonas* on Nutrient Agar to which glycerol was added. Greenberg and Cooper employed this medium in cultivation of *Staphylococci* for the preparation of vaccines and antigens. Nutrient Agar has relatively simple formulation which provides the necessary nutrients for the growth of many microorganisms which are not very fastidious.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	5.000
Beef extract	3.000
Agar	15.000

PRINCIPLE

The medium consists of beef extract that provides vitamins, organic nitrogen compounds, salts and little carbohydrates. Peptone provides amino acids and long chain peptides for the organisms.

INSTRUCTION FOR USE

Dissolve 23.0 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 5-10% v/v sterile defibrinated bloods.

Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow coloured homogeneous free flowing powder
Appearance of prepared medium	: Yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 6.8 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
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Salmonella Enteritidis	13076	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-24 Hours
Salmonella Typhi	6539	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-24 Hours
Shigella flexneri	12022	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	Luxuriant	$\geq 70\%$	35-37°C	18-24 Hours

PACKAGING:

Inpacksize 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. 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.
2. Standard Methods for the Examination of Dairy Products, 1978, 14th ed., APHA, Washington D.C.
3. Greenberg and Cooper, 1960, Can. Med. Assn. J., 83:143.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
5. 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.
6. Pelczar, Chan and Kreig, 1986, Microbiology, 5th ed., McGraw-Hill Book Company, New York.
7. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP MedNet GmbH Buckhorn 10, 48163 Münster, Germany Authorized Representative	 CE 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 LabUse Only

