TRM 341 – NUTRIENT AGAR

INTENDED USE

For general cultivation of less fastidious microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Nutrient Agar is a 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 has the formula originally designed for use in the Standard Methodfor Examination of Water and Waste water. It is also recommended to test microorganism from clinical specimen. It is one of the several non-selective media useful in routine cultivation of microorganisms. Itcan 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 suitablefor the cultivation of related fastidious organisms.

COMPOSITION

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

PRINCIPLE

Medium contains Peptone, Beef extract and Yeast extract 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. Agar act as a solidifying agent.

INSTRUCTION FOR USE

1. Nutrient Agar is a ready to use solid media in glass bottle. The medium is pre-sterilized hencesterilization is not required.
2. Prior to use, medium in the bottle can be melted either by using a pre-heated water bath or anyother method.
3. Slightly loosen the cap before melting.
4. Pour the liquefied agar into each plate, anticipated to need for the test and cover the bottom to about 6-7 mm.
5. Allow to harden or firm up at room temperature. Plates are now ready to inoculate or refrigerate for later use.

QUALITY CONTROL SPECIFICATIONS

Appearance of Prepared medium : Light yellow colour, clear to slightly opalescent gel.
Appearance of prepared medium : 100 ml of the medium in glass bottle.
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
Escherichia coli	25922	50-100	Good - Luxuriant	>=50%	37±2°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Good - Luxuriant	>=50%	37±2°C	18-24 Hours
Staphylococcus aureus	25923	50-100	Good - Luxuriant	>=50%	37±2°C	18-24 Hours
Salmonella Typhi	6539	50-100	Good - Luxuriant	>=50%	37±2°C	18-24 Hours
Staphylococcus aureus	25923	50-100	Good - Luxuriant	>=50%	37±2°C	18-24 Hours
Streptococcus pyogenes	19615	50-100	Good - Luxuriant	>=50%	37±2°C	18-24 Hours

PACKAGING:
In pack size of 100 ml X 25.

STORAGE
On receipt, store bottles in the dark at 10 to 25° C. Avoid freezing and overheating. The medium may be used up to the expiration date and incubated for the recommended incubation times. Bottles from opened packages can be used up to the expiration date. Opened bottles must be used immediately. To prepare plates or tubes from the bottled medium, it must first be liquefied. Do not liquefy any leftoversfor a second time.

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.
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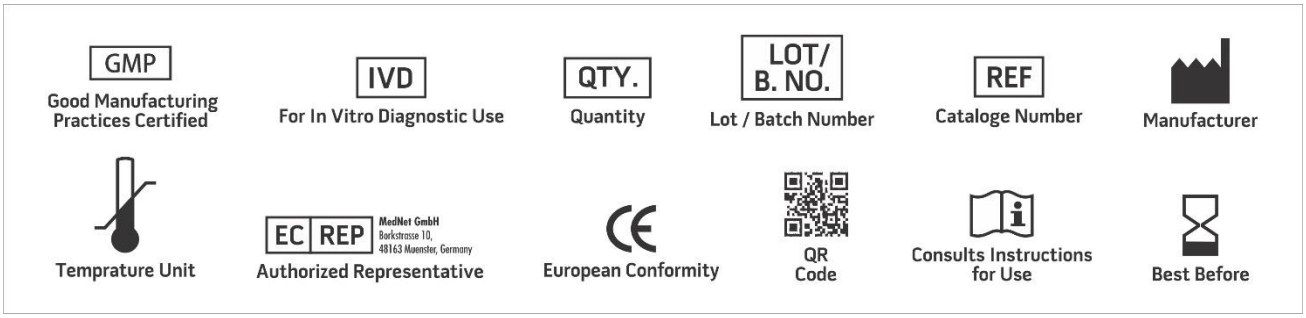
3. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock. D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. Lapage S., Shelton J. and Mitchell T., 1970, Methods in Microbiology', Norris J. and Ribbons D.,(Eds.), Vol. 3A, Academic Press, London.
7. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott,Williams and Wilkins, Baltimore.
8. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination ofDairy Products, 17th Ed., APHA Inc., Washington, D.C.



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

***For Lab Use Only**

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