

## TM 343 – NUTRIENT AGAR (as per IP)

### INTENDED USE

For general purpose medium which may be used as enriched medium by incorporating blood or other biological fluids.

### PRODUCT SUMMARY AND EXPLANATION

Nutrient Agar is a basic culture medium used for maintaining microorganisms, for purity checking prior to biochemical or serological testing. It is used for the cultivation and enumeration of bacteria, which are not particularly fastidious. In semisolid form it is used for maintenance of control or standard organisms. Indian Pharmacopoeia has recommended it for microbial limit tests of viable aerobic microorganism present in pharmaceutical substances.

### COMPOSITION

Ingredients	Gms / Ltr
Peptone	10.000
Beef extract	10.000
Sodium chloride	5.000
Agar	12.000

### PRINCIPLE

The medium consists of Peptone and beef 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. Nutrient media may be used as enriched media by the addition of 10% v/v blood or other biological fluids like ascitic fluid, serum etc.

### INSTRUCTION FOR USE

- Dissolve 37.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 10lbs pressure(115°C) for 30 minutes or alternatively at 15 psi pressure (121°C) for 15 minutes or as per validated cycle.

### QUALITY CONTROL SPECIFICATIONS

<b>Appearance of Powder</b>	: Cream to yellow homogeneous free flowing powder
<b>Appearance of prepared medium</b>	: Light yellow coloured clear to slightly opalescent gel forms in Petri plates.
<b>pH (at 25°C)</b>	: 7.3 ± 0.2

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period



<i>Pseudomonas aeruginosa</i>	9027	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
<i>Salmonella Typhimurium</i>	14028	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	6538	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
<i>Escherichia coli</i>	8739	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. Lapage S., Shelton J. and Mitchell T., 1970, 'Methods in Microbiology', Norris J. and Ribbons D. (ed.), Vol. 3A., Academic Press, London.
2. Indian Pharmacopoeia, 1996, Govt. of India, The Controller of Publications, Delhi.

 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 Authorized Representative <small>MedNet GmbH Borkstrasse 10, 48163 Moenster, Germany</small>	 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**  
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