

## TM 1056 – NUTRIENT AGAR (W/ 1% PEPTONE)

### INTENDED USE

General culture medium, can be used as enriched medium with blood or other biological fluids.

### PRODUCT SUMMARY AND EXPLANATION

Nutrient Agar with 1% Peptone has almost double concentration of the nitrogen sources than that used in Nutrient Agar, making it more nutritive. 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. It is one of the several non-selective media useful in routine cultivation of microorganisms.

### COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	10.000
Beef extract	5.000
Agar	15.000
Sodium chloride	5.000

### PRINCIPLE

The medium consists of Beef extract and peptic digest of animal tissue which provide the necessary nitrogen compounds, carbon, vitamins and also some trace ingredients to non-fastidious organisms like *Bacillus subtilis* and *Staphylococcus aureus*. Sodium chloride maintains osmotic equilibrium of the medium. With the addition of 10% v/v blood or other biological fluids like ascetic fluid, serum etc, this media is recommended for growing fastidious organisms.

### INSTRUCTION FOR USE

- Dissolve 35.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.
- 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	: Basal medium: Light yellow coloured clear to slightly opalescent gel. After addition of 5%v/v sterile defibrinated blood : Cherry red coloured opaque 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	Growth w/ Blood	Recovery w/ Blood	Haemolysis	Incubation Temperature	Incubation Period
<i>Staphylococcus aureus</i>	25923	50-100	Luxuriant	>=70%	Luxuriant	>=70%	Beta	35-37°C	18-48 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Good	40-50%	Luxuriant	>=70%	Beta	35-37°C	18-48 Hours
<i>Streptococcus pneumoniae</i>	6303	50-100	Good	40-50%	Luxuriant	>=70%	Alpha	35-37°C	18-48 Hours
<i>Staphylococcus aureus</i>	6538	50-100	Luxuriant	>=70%	Luxuriant	>=70%	Beta	35-37°C	18-48 Hours
<i>Neisseria meningitidis</i>	13090	50-100	Good	40-50%	Luxuriant	>=70%	None	35-37°C	18-48 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

- Lapage S., Shelton J. and Mitchell T., 1970, Methods in Microbiology', Norris J. and Ribbons D., (Eds.), Vol. 3A, Academic Press, London.
- MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins, Baltimore.
- Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., American Public Health Association, Washington, D.C.
- American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
- MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.



<b>GMP</b> Good Manufacturing Practices Certified	<b>IVD</b> For In Vitro Diagnostic Use	<b>QTY.</b> Quantity	<b>LOT/ B. NO.</b> Lot / Batch Number	<b>REF</b> Catalogue Number	 Manufacturer
 Temperature Unit	<b>EC REP</b> MedNet GmbH Baukstrasse 10, 49163 Moersdorf, Germany 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**  
**Revision: 08 Nov., 2019**