

TM 596 - STANDARD NUTRIENT AGAR

INTENDED USE

A general purpose medium for cultivation and enumeration of fastidious and non-fastidious microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Standard Nutrient Agar is formulated as per the recommendation of APHA as a general purpose medium for the cultivation of non-fastidious organisms from water and wastewater, dairy and food products. when supplemented with blood, ascetic fluids, serum or egg yolk etc. which makes it suitable for the cultivation of relatively fastidious organisms.

COMPOSITION

Ingredients	Gms / Ltr		
Beef extract	10.000		
Peptic digest of lean meat from	500.000		
Sodium chloride	5.000		
Agar	20.000		

PRINCIPLE

Peptic digest of lean meat provides the amino acids and large chain peptides. Beef extract (meat infusion) provides water soluble substances like carbohydrates, vitamins, organic nitrogen compounds and salts. Sodium chloride maintains osmotic equilibrium.

INSTRUCTION FOR USE

- Dissolve 45 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well before pouring in sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Yellowish brown coloured homogeneous free flowing powder.

Appearance of prepared medium : Light amber coloured clear to slightly opalescent gel forms in petri plates.

pH (at 25°C) : 7.6±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Good - luxuriant	>=50%	35-37°C	18-24 Hours









Staphylococcus aureus	25923	50-100	Good - luxuriant	>=50%	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Good - luxuriant	>=50%	35-37°C	18-24 Hours
Streptococcus pneumoniae	6303	50-100	Good - luxuriant	>=50%	35-37°C	18-24 Hours
Salmonella Typhi	6539	50-100	Good - luxuriant	>=50%	35-37°C	18-24 Hours

PACKAGING:

In pack size of 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.

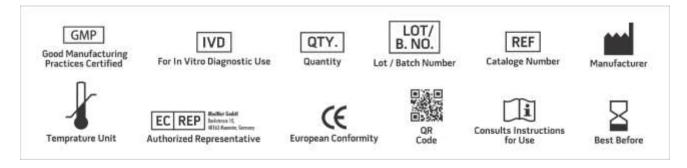
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- 1. Greenberg A. E., Trussell R. R. and Clesceri L. S. (Eds.), 1985, Standard Methods for the Examination of Water and Wastewater, 16th ed., APHA, Washington, D.C.
- 2. Speck M. (Ed.), 1984, Compendium of Methods for the Microbiological Examination of Foods, 2nd ed., APHA, Washington, D.C.
- 3. Pelczar, Chan and Kreig, 1986, Microbiology, 5th ed., McGraw-Hill Book Company, New York.



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

*For Lab Use Only
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