

TM 2256 - NUTRIENT AGAR 1.5% (ISO 1995, ISO/DIS 13720:2010)

INTENDED USE

Recommended general purpose nutrient medium which can be used for cultivation of fastidious microorganisms after appropriate enrichment.

PRODUCT SUMMARY AND EXPLANATION

Nutrient Agar is recommended for cultivation and maintenance of non-fastidious microorganisms. Recently ISO Committee has recommended it with a slight modification for sub cultivation of *Pseudomonas* species isolated from meat and meat products.

COMPOSITION

Ingredients	Gms / Ltr	
Peptic digest of animal tissue	5.000	
Beef extract	3.000	
Sodium chloride	5.000	
Agar	15.000	

PRINCIPLE

The medium consists of Peptic digest of animal tissue which is the principal source of organic nitrogen while Beef extract provides carbohydrates, vitamins, organic nitrogen compounds and salts. Sodium chloride makes the medium isotonic preventing haemolysis of red blood corpuscles. This Nutrient Agar may be used for blood culturing work after the addition of sterile 5% v/v defibrinated blood and additional Sodium chloride.

INSTRUCTION FOR USE

- Dissolve 28.0 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 sterile blood, ascetic fluid or serum after cooling to 45-50°C.
- 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 gel forms in Petri plates. With the addition of blood

Cherry red coloured opaque gel forms in Petri plates.

pH (at 25°C) : 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.











Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Peudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Streptococcus pneumoniae	6303	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	Luxuriant	>=70%	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. Speck M. (Ed.), 1984, Compendium of Methods for the Microbiological Examination of Foods, 2nd ed., APHA, Washington D.C.
- 2.International Organization for Standardization (ISO), 1995, Draft ISO/DIS 13720.
- 3.Pelczar, Chan and Kreig, 1986, Microbiology, 5th ed., McGraw Hill Book Co., N.Y.



























Consults Instructions for Use

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019







