

TM 327 – NUTRIENT BROTH (W/O NaCl) pH 6.9

INTENDED USE

General purpose medium for cultivation of microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Nutrient Broth has the formula originally developed for use in Standard Methods for the Examination of Water and Waste Water. If this medium is incorporated with 6.5% sodium chloride, then it acts as a differential and selective agent by interfering with the osmotic balance and the permeability of membrane of majority of microorganisms. On addition of 6.5% Sodium chloride, the medium can also be used to determine salt tolerance of bile esculin positive Enterococci.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	5.000
Beef extract	3.000

PRINCIPLE

The medium consists of Peptone and beef extract that support the growth of non-fastidious microorganisms. It provides nitrogenous and carbonaceous compounds, long chain amino acids and other essential growth nutrients.

INSTRUCTION FOR USE

- Dissolve 8.0 grams in 1000 ml purified/distilled water.
- Heat, if necessary, to dissolve the medium completely. Dispense into tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured clear solution without any precipitate.
pH (at 25°C)	: 6.9 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	35-37°C	18-48 Hours



<i>Enterobacter aerogenes</i>	13048	50-100	Good-luxuriant	35-37°C	18-48 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Good-luxuriant	35-37°C	18-48 Hours
<i>Salmonella Typhi</i>	6539	50-100	Good-luxuriant	35-37°C	18-48 Hours
<i>Staphylococcus aureus subsp. aureus</i>	25923	50-100	Good-luxuriant	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

1. 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.
2. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
4. 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.

 GMP Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

***For Lab Use Only**
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