

TM 2261 – NUTRIENT BROTH WITH 1% PEPTONE

INTENDED USE

A sterility testing medium for aerobes.

PRODUCT SUMMARY AND EXPLANATION

Nutrient Broth with 1% Peptone can be used as a sterility testing medium for aerobes against Nutrient Broth recommended for microbial limit tests as per standard pharmacopoeia. This broth can also be used as the suspending medium for cooked meat granules for the cultivation of anaerobic organisms. Nutrient Broth with 1% Peptone is a nutritionally rich medium that facilitates the growth of very low inocula, when with fastidious microorganisms. Nutrient Broth with 1% Peptone has almost double concentration of the nitrogen sources than that used in Nutrient Broth, making it more nutritive.

COMPOSITION

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

PRINCIPLE

The medium consists of peptone and Beef extract which provides nitrogen compounds, vitamins and also some trace ingredients to non-fastidious organisms like *Bacillus subtilis* and *Staphylococcus aureus*. Sodium chloride helps to maintain osmotic balance in the medium.

INSTRUCTION FOR USE

- Dissolve 25.0 grams in 1000 ml purified/distilled water.
- Heat, if necessary, to dissolve the medium completely.
- Dispense into test tubes or flasks as desired and 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 yellow coloured clear solution in tubes.

pH (at 25°C) : 7.4 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism ATCC Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
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Escherichia coli	25922	50-100	Luxuriant	35-37°C	18-24 Hours
Enterobacter aerogenes	13048	50-100	Luxuriant	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	6538	50-100	Luxuriant	35-37°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	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.

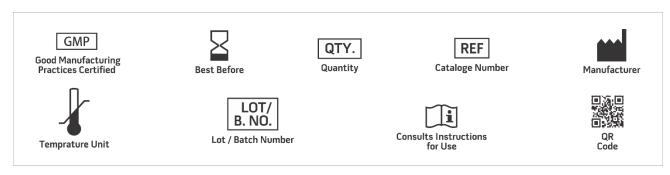
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. 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.
- 2. Lapage S., Shelton J. and Mitchell T., 1970, Methods in Microbiology', Norris J. and Ribbons D., (Eds.), Vol. 3A, Academic Press, London.
- 3. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins, Baltimore.
- 4. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.

















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









