

# TM 329 - NUTRIENT BROTH (W/ 1% PEPTONE) (IP 6579)

#### **INTENDED USE**

Sterility testing medium for aerobes and for microbial limit test.

## PRODUCT SUMMARY AND EXPLANATION

Nutrient Broth Medium is a general purpose medium used for the examination of water and dairy products according to Standard Methods for the Examination of Water and Wastewater and Dairy Products in accordance with IP. It can also be used for cultivating several less fastidious microorganisms.

## **COMPOSITION**

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

#### **PRINCIPLE**

The medium consists of Peptone and Beef extract that 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 the osmotic equilibrium of 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 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 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
Escherichia coli	8739	50-100	Luxuriant	35-37°C	18-24 Hours









Escherichia coli	25922	50-100	Luxuriant	35-37°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	35-37°C	18-24 Hours
Enterobacter aerogenes	13048	50-100	Luxuriant	35-37°C	18-24 Hours
Peudomonas aeruginosa	27853	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.

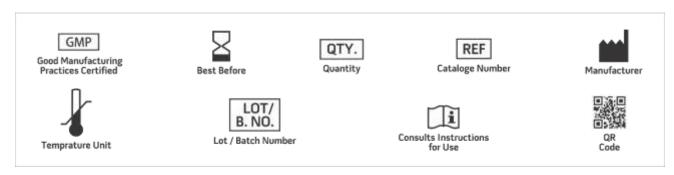
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

# **DISPOSAL**

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

## **REFERENCES**

- 1. 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. American Public Health Association, 1978, Standard Methods for the Examination of Dairy Products, 14th ed., APHA, Inc., Washington, D.C.
- 3. American Public Health Association, 1917, Standard Methods of Water Analysis, 3rd ed., APHA, Inc., Washington, D.C.
- 4. Indian Pharmacopoeia, 1985, Third Edition, Government of India Ministry of Health of family Welfare.















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







