TM 578 – NUTRIENT AGAR pH 6.0 (W/ 0.8% NaCl.)

INTENDED USE
For cultivation of bacteria requiring slightly acidic pH.

PRODUCT SUMMARY AND EXPLANATION
Nutrient Media are general purpose media used for the examination of water and dairy products according to Standard Methods for the Examination of Water and Waste water and Dairy Products. Nutrient Agar, pH 6.0 with 0.8% NaCl is a modification of Nutrient Agar w/ 0.8 % NaCl and recommended by APHA. In the former, the pH of the medium is adjusted to 6.0 to allow the growth of organisms requiring slightly acidic pH. Since the medium contains 0.8 % sodium chloride, it can be used as a base for enrichment with blood or ascetic fluid or other supplements for cultivation of fastidious microorganisms.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	5.000
Beef extract	3.000
Agar	15.000
Sodium chloride	8.000

PRINCIPLE
The medium consists of Beef extract and Peptone that provide the necessary nitrogen compounds, carbon, vitamins and also some trace ingredients to the non -fastidious organisms like *Bacillus subtilis* and *Staphylococcus aureus*. Sodium chloride maintains osmotic equilibrium of the medium so that red blood cells do not rupture when blood is added as supplement.

INSTRUCTION FOR USE
- Dissolve 31.0 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. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Cream to yellow homogeneous free flowing powder.

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

pH (at 25°C) : 6.0 ± 0.2

INTERPRETATION
Cultural characteristics observed after incubation.

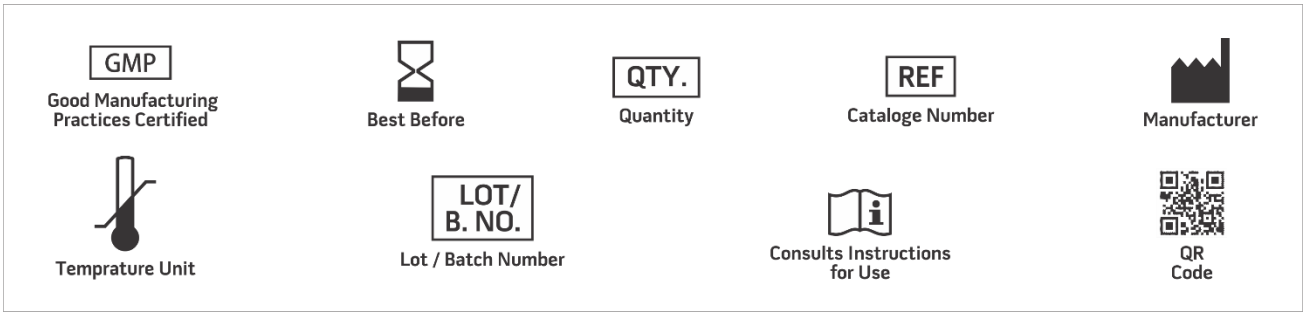
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Bacillus subtilis subsp. spizizenii	6633	50-100	Good	40-50%	35-37°C	18-48 Hours
Candida albicans	10231	10-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Staphylococcus aureus subsp.aureus	25923	50-100	Good	40-50%	35-37°C	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.American Public Health Association, 1978, Standard Methods for the Examination of Dairy Products, 14th Ed., APHA, Inc., Washington, D.C.
2. Clesceri L. S, Greenberg A. E. and Eaton A. D., (Eds.), 1998, Standard Methods for the Examination of Water and Wastewater, 20th Ed., APHA, Washington, D.C.
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.
5. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
6. 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**
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