

TM 241 – NUTRIENT GELATIN

INTENDED USE

For detection of gelatin liquefaction by proteolytic microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Nutrient Gelatin is prepared as per the formulation formerly used in the examination of water, sewage and other materials of sanitary importance. Gelatin liquefaction is one of the essential test for the differentiation of enteric bacilli. This medium can also be used for the microbial plate counts of water. Nutrient Gelatin Medium is not recommended for determination of gelatin liquefaction by fastidious species and obligate anaerobes. At various intervals during the incubation process, examine the tubes for growth and liquefaction. At each interval, tighten the caps and transfer the tubes to refrigerator for sufficient time period to determine whether liquefaction has occurred or not.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	5.000
Beef extract	3.000
Gelatin	120.000

PRINCIPLE

The medium consists Peptone and Beef extract that supplies nitrogen and carbon source, long chain amino acids and other growth nutrients for the growth of non-fastidious organisms. Gelatin is the substrate for the determination of the ability of an organism to produce gelatinase, a proteolytic enzyme active in the liquefaction of gelatin.

INSTRUCTION FOR USE

- Dissolve 128.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely. Dispense into test tubes.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Allow the tubed medium to cool to 45-50°C in an upright position.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing slightly coarse powder.
Appearance of prepared medium	: Light amber coloured clear to slightly opalescent gel forms in tubes as butts.
pH (at 25°C)	: 6.8 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation. (For gelatinase test, cool below 20°C)

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Gelatinase	Incubation Temperature	Incubation Period



<i>Bacillus subtilis</i>	6633	50-100	Good-luxuriant	Positive reaction	35-37°C	1 to 7 Days
<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	Negative reaction	35-37°C	1 to 7 Days
<i>Proteus vulgaris</i>	13315	50-100	Good-luxuriant	Positive reaction	35-37°C	1 to 7 Days
<i>Staphylococcus aureus subsp. aureus</i>	25923	50-100	Good-luxuriant	Positive reaction	35-37°C	1 to 7 Days

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. American Public Health Association, 1975, Standard Methods for the Examination of Water and Wastewater, 14th Ed., APHA, Washington, D.C.
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3. Lautrop H., 1956, Acta. Pathol. Microbiol. Scand., 39:357.
4. Frobisher M., 1957, Fundamentals of Microbiology, 6th Ed., W.B. Saunders Co., Philadelphia, p. 239.
5. MacFaddin, J.F. 1985. Media for Isolation, Cultivation, Identification, Maintenance of Bacteria, Vol. I. Williams & Wilkins, Baltimore, MD.
6. Branson D., 1972, Methods in Clinical Bacteriology, Springfield, Ill, pg. 21.
7. Cawan S. and Steel K., 1966, Manual for the Identification of Medical Bacteria, Cambridge University Press, Pg. 19, 27-28, 116 and 156.
8. 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.
9. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative MedNet GmbH Birkstrasse 10, 49163 Moenster, Germany	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

***For Lab Use Only**
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