

NUTRIENT GELATIN

Medium for determination of gelatin liquefaction and plate count at 20 °C.

TYPICAL FORMULA (g/l)

Beef Extract	3.0
Peptone	5.0
Gelatin	120.0

Final pH = 6.8 ± 0.2 at 25 °C.

DIRECTIONS

Suspend 128.0 g of powder in 1 liter of distilled or deionized water. Heat until completely dissolved.
Dispense into final containers. Sterilize in autoclave at 121 °C for 15 minutes.

DESCRIPTION

NUTRIENT GELATIN is used for determining gelatinase production by proteolytic microorganisms. Gelatin liquefaction is an important characteristic in classifying Enterobacteriaceae and non fermenting Gram-negative bacteria.

TECHNIQUE

To carry out the test, use the stab technique to inoculate the medium solidified in the tube and incubate at 20-22 °C for 24 hours up to 14 days. Place the tube in a refrigerator for 10 minutes every 24 hours. If the inoculated microorganism is provided with proteolytic enzymes, the medium remains liquid.

To determine the plate count, recommended by APHA (1946), prepare serial tenfold dilutions of test material. Add 1 ml of test samples to a sterile Petri dish. Add 18-20 ml of sterile molten medium (cooled to 45-50°C) and swirl the plate gently to mix well. Allow to solidify before incubating at 19-21 °C for 48 hours.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige.

Prepared medium

Appearance: clear.

Color: amber.

Incubation conditions: 19-20 °C for 48 hours.

Microorganism	ATCC	Growth	Characteristics
<i>Staphylococcus aureus</i>	25923	good	liquefaction
<i>Escherichia coli</i>	25922	good	

PERFORMANCE AND LIMITATIONS

Gelatin was one of the first solidifying agents in the preparation of culture media for microbiology. However, because of its low gel point (25 °C), a temperature, which is definitely not optimal for microbial growth, it was later replaced with agar.

The medium is now mainly used to determine the ability to liquefy gelatin, a standard method in taxonomic studies.

STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident.

Store prepared tubes at 2-8 °C.

REFERENCES

- Ewing, V.H. (1986). Edwards and Ewing's Identification of Enterobacteriaceae, 4th Ed. Elsevier Science Publishing Co., Inc., New York., Ny
- APHA (1946) Standard Method for the Examination of Water and Sewage, 5th ed.



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PRESENTATION









Product	REF	
NUTRIENT GELATIN (3.9 l)	611214	500 g
NUTRIENT GELATIN (0.7 l)	621214	100 g

TABLE OF SYMBOLS

LOT Batch code	 Caution, consult accompanying documents	 Manufacturer	 Contains sufficient for <n> tests	 Keep away from heat source
REF Catalogue number	 Fragile, handle with care	 Use by	 Temperature limitation	



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