

Nutrient Gelatin



Medium used for the determination of gelatin liquefaction.

• CONTENTS (Liter)

Beef Extract	3.0 g
Peptone	5.0 g
Gelatin	120.0 g
Final pH = 6.8 ± 0.2 at 25°C .	

• PROCEDURE

Suspend 128.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to $45\text{-}50^{\circ}\text{C}$ in water bath. Mix well. Dispense in tubes.

• INTERPRETATION

Nutrient Gelatin is a medium used for the determination of gelatin liquefaction. Beef extract and peptone provide the nitrogen and vitamin sources. 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.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at $35 \pm 1^{\circ}\text{C}$ for 3 - 7 days up to 10 days. Gelatin liquefies at above 20°C . If tubes are incubated at 35°C , they must be kept in a refrigerator for about 2 hours and stood about 20 minutes at room temperature before interpretation of the results. Liquefaction frequently occurs only at the tube surface, so care should be taken not to shake the tubes. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige.

Prepared medium

Appearance: clear to slightly opalescent.

Color: light amber.

Incubation conditions: $35 \pm 1^{\circ}\text{C}$ / 3 - 7 days up to 10 days

Microorganism	ATCC	Inoculum CFU	Growth	Gelatin Liquefaction
<i>Bacillus subtilis</i>	9466	50-100	good	+
<i>Staphylococcus aureus</i>	25923	50-100	good	+
<i>Escherichia coli</i>	25922	50-100	good	-

• STORE

The powder is very hygroscopic. Store the powder at room temperature, 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 medium at 2-8°C.

• REFERENCES

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

• PACKAGE

Cat. No : MB-N1214 Nutrient Gelatin	500 G
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