

Standard Gelatin Agar



Medium used for the identification and determination of the total microbial count and gelatin-liquefying microorganisms.

• CONTENTS (Liter)

Peptone from Meat	10.0 g
Beef Extract	10.0 g
Sodium Chloride	5.0 g
Gelatin	10.0 g
Agar	15.0 g
Final pH = 7.3 ± 0.2 at 25°C	

• PROCEDURE

Suspend 50.0 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 - 50°C in water bath. Mix well. Pour into petri dishes.

• INTERPRETATION

Standard Gelatin Agar is a medium used for the identification and determination of the total microbial count and gelatin-liquefying microorganisms. Peptone from meat and beef extract provide nitrogen compounds, carbon compounds and nutrients. Sodium chloride maintains the osmotic balance. Gelatin acts as a substrate for bacteria producing gelatinase. Gelatin liquefaction is observed by flooding the plates with saturated solution of ammonium sulfate.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 20 ± 2°C for 18 - 48 hours. Gelatin liquefaction is observed by flooding the plates with saturated solution of ammonium sulfate. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance : slightly opalescent

Color: light amber

Incubation conditions: 20 ± 2°C / 18 - 48 hours

(gelatin liquefaction is observed by flooding the plates with saturated solution of ammonium sulfate)

Microorganism	ATCC	Inoculum CFU	Growth	Gelatin Liquefaction
<i>Proteus vulgaris</i>	13315	50-100	good	+ (clear zone)
<i>Pseudomonas aeruginosa</i>	27853	50-100	good	+ (clear zone)
<i>Staphylococcus aureus</i>	25923	50-100	good	+ (clear zone)
<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. Store prepared medium at 2 - 8°C.

• REFERENCES

1. American Public Health Association, 1975, Standard Methods for the Examination of Water and Wastewater, 14th Ed., APHA, Washington, D.C.
2. Ewing, 1986, Edwards and Ewings Identification of Enterobacteriaceae, 4th Ed., Elsevier Science Publishing Co., Inc. New York.
3. Wilson G. S. and Miles A. A (1964) Topley and Wilson's Principles of Bacteriology and Immunity. 5th Edn. Vol.1. Edward Arnold. London. pp. 493- 494.

• PACKAGE

Cat. No : MB-S2253 Standard Gelatin Agar	500 G
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