

Mannitol Salt Agar



Medium used for the isolation and cultivation of *Staphylococcus aureus* from milk, food and other specimens.

*Equally use with MFDS (MB-M1029K).

• CONTENTS (Liter)

Beef Extract	2.5 g
Peptone	10.0 g
Mannitol	10.0 g
Sodium Chloride	75.0 g
Phenol Red	0.025 g
Agar	15.0 g
Final pH 7.4 ± 0.2 at 25°C	

• PROCEDURE

Suspend 112.53 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. If necessary, aseptically add 10% of Egg Yolk Emulsion (MB-E1864). Mix well. Pour into petri dishes.

• INTERPRETATION

Mannitol Salt Agar is a medium used for the isolation and cultivation of *Staphylococcus aureus* from milk, food and other specimens. Beef extract and peptone are the nitrogen and vitamin sources. Mannitol is the fermentable carbohydrate. High concentration of sodium chloride inhibits the growth of microorganisms other than *Staphylococcus aureus*. Phenol red is a pH indicator. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36 ± 1°C for 18 - 24 hours up to 72 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: straw pink

Prepared medium

Appearance : slightly opalescent

Color: pinkish red

Incubation conditions: 36 ± 1°C / 18 - 24 hours up to 72 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Staphylococcus aureus</i>	25923	50-100	good	yellow colonies with yellow halo
<i>Escherichia coli</i>	25922	≥10 ³	inhibited	-

• 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. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C. ,,
2. Koch P. K., 1942, Zentralbl. Bakteriol. Parasitenkd. Abt. I Orig.149:122.
3. Chapman G. H., 1945, J. Bacteriol., 50:201.
4. Refer to the MFDS.

• PACKAGE

Cat. No : MB-M1029 Mannitol Salt Agar	500 G
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• MICROBIAL CULTURE IMAGES



None



Staphylococcus aureus ATCC 25923



Escherichia coli ATCC 25922

Incubation conditions : 36±1°C / 18 - 24 hours up to 72 hours