

MANNITOL SALT BROTH

Selective medium for isolation of presumptive pathogenic Staphylococci.

TYPICAL FORMULA	(g/l)
Beef Extract	1.0
Enzymatic Digest of Casein	5.0
Soy Peptone	5.0
Sodium Chloride	75.0
Mannitol	10.0
Phenol Red	0.025
Final pH 7.4 ± 0.2 at 25°C	

DESCRIPTION

MANNITOL SALT BROTH is a selective medium used for isolation of presumptive pathogenic Staphylococci.

PRINCIPLE

Beef extract, enzymatic digest of casein and soy peptone provide nitrogen, carbon and vitamins required for organisms growth. The high sodium chloride concentration inhibits the most of bacteria except Staphylococci. Mannitol is the fermentable carbohydrate. Phenol red is the pH indicator.

PREPARATION

Suspend 96 g of powder in 1 liter of distilled water. Heat until completely dissolved. Dispense into suitable containers. Autoclave at 121°C for 15 minutes.

TECHNIQUE

Inoculate MANNITOL SAL BROTH with the sample using a sterile loop or swab. Incubate at 35 ± 2°C for 18-48 hours.

INTERPRETATION OF RESULTS

Staphylococcus aureus ferments mannitol to produce yellow coloured medium.

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 plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product must be used only by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

1. Chapman G.H. (1945) J. Bact., 50:201.
2. Marshall R. (Ed.) (1992) Standard Methods for the Examination of Dairy Products, 16th ed., APHA, Washington, D.C.
3. Bacteriological Analytical Manual (1995) Food and Drug Administration, 8th ed., AOAC, International, U.S.A.
4. MacFaddin J. F. (1985) Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.



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PRODUCT SPECIFICATIONS

NAME

MANNITOL SALT BROTH

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGE

Ref.	Content	Packaging
610343	500 g	500 g of powder in plastic bottle
620343	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM

7.4 ± 0.2

USE

MANNITOL SALT BROTH is a selective medium used for isolation of presumptive pathogenic Staphylococci.

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Dehydrated medium

Appearance: free-flowing, homogeneous

Colour: light-yellow to pink

Prepared medium

Appearance: limpid solution

Colour: red

SHELF LIFE










4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
Inoculum for productivity: 10-100 CFU/ml
Inoculum for selectivity: 10⁴-10⁵ CFU/ml
Inoculum for specificity: ≤10⁴ CFU/ml
Incubation conditions: 18-24 h at 35 ± 2°C

Microorganism		Growth	Colour of medium
<i>Escherichia coli</i>	ATCC® 25922	Inhibited	red
<i>Staphylococcus aureus</i>	ATCC® 25923	good	yellow
<i>Staphylococcus epidermidis</i>	ATCC® 12228	good	red

TABLE OF SYMBOLS

 Batch code	 Keep away from heat sources	 Manufacturer	 Use by	 Fragile, handle with care
 Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Consult instruction for use	



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