

Technical Data Sheet

Product: MANNITOL SALT AGAR (MSA) (CHAPMAN MEDIUM) (EUROPEAN PHARMACOPOEIA)

Specification

Selective medium for the isolation of pathogenic staphylococci according to the Pharmacopoeial Harmonized Methodology and the ISO Standards.

Presentation

30 Prepared Plates	Packaging Details	Shelf Life	Storage
55 mm Plates for filtration purposes	1 box containing: 5 plastic bags with 6 plates of 55	6 months	2-25°C
with: 8 ± 1 ml	mm/ bag.		

Composition

Composition (g/l):	
Meat Peptone	5.000
Beef extract	1.000
Peptone from casein	5.000
Sodium chloride	75.000
D(-)Mannitol	10.000
Phenol red	0.025
Agar	15.000

Description /Technique

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

Filter the sample through a 0.45 Im pore membrane and apply it onto the surface of the agar.

Incubate the plates aerobically at 35+/-2°C for 24-48h

(Incubation times longer than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications,...)

After incubation, enumerate all the colonies that have developd onto the surface of the membrane, considering both yellowish colonies and red or colourless colonies.

Calculate total microbial count per ml of sample by multiplying the average number of clonies per plate by the inverse dilution factor. Report results as Colony Forming Unit (CFU's) per ml along with incubation time and temperature.

Presumptive isolation of S. aureus must be confirmed by further microbiological and chemical tests.



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Quality control

Physical/Chemical control

Color : Strongly pink

pH: 7.4 ± 0.2 at 25°C

Microbiological control

Membrane Filtration /Practical range 100±20 CFU; Min. 50 CFU (Productivity)./10⁴-10⁶ CFU for Selectivity. Microbiological control according to ISO 11133:2014/ Adm 1:2018.

Aerobiosis. Incubation at 30-35°C. Reading at 24-48 until 72 h

Microorganism

Staphylococcus aureus ATCC[®] 6538, WDCM 00032 Stph. aureus ATCC[®] 25923, WDCM 00034 Stph. epidermidis ATCC[®] 12228, WDCM 00036 Escherichia coli ATCC[®] 8739, WDCM 00012

Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH Check at 7 days after incubation in same conditions

Bibliography

· ATLAS, R.M. & L.C.PARKS (1993) Handbook of Microbiological Media. CRC Press. Boca Raton. Fla. USA.

· CHAPMAN (1945) The significance of sodium chloride in studies of staphylococci. J. Bact 50:201.

• DOWNES, F.P. & K. ITO (2001) Compendium of Methods for the Microbiological Examination of Foods. 4th ed. APHA. Washington. DC. USA.

Growth

Good (≥70 %)

Good (≥70 %)

Poor to good

Inhibited

• EUROPEAN PHARMACOPOEIA 8.0 (2014) 8th ed. § 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. EDQM. Council of Europe. Strasbourg.

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