

TRYPTIC SOY BROTH WITH NaCl 10% AND SODIUM PYRUVATE

For the detection of *Staphylococcus aureus* in foods with MPN method.

TYPICAL FORMULA (g/l)

Tryptone	17.0
Soy Peptone	3.0
Sodium Chloride	95.0
Dipotassium Hydrogen Phosphate	2.5
Glucose	2.5
Sodium Pyruvate	10.0

DIRECTIONS

Suspend 130g in 1000ml of cold distilled water, heat to dissolve, distribute 10ml into test tubes and sterilise by autoclaving at 121°C for 15 minutes.

Final pH 7.3 ± 0.2

DESCRIPTION

Tryptic Soy Broth with NaCl 10% and Sodium Pyruvate is a selective medium, recommended by AOAC and FDA BAM for the detection of *Staphylococcus aureus* in foods by Most Probable Number method. The formulation meets the requirements of AOAC recommended medium and contains sodium pyruvate, omitted in the previous editions of Official Method of Analysis.

The Most Probable Number method is recommended for routine surveillance of products in which small numbers of *S.aureus* are expected and in foods expected to contain a large population of competing species.

TECHNIQUE

Inoculate 3 tubes of liquid medium with 1ml portion of decimal dilutions of each sample. Highest dilution must give negative endpoint. Incubate tubes 48 +/- 2 hrs at 35°C. Using a 3mm loop, transfer 1 loopful from each tube showing growth (turbidity) to plate of Baird Parker Agar. Vortex-mix tubes before streaking if growth is visible only on bottom or sides of tubes. Streak inoculum to obtain well isolated colonies. Incubate plates at 35°C for 48 hours. From each plate showing growth, transfer at least 1 colony suspected to be *S.aureus* into a small tube containing 0.2 – 0.3ml of BHI Broth and, after incubation, perform coagulase test and ancillary identification tests. Report as *S.aureus*/g as MPN/g according to appropriate MPN tables.

USER QUALITY ASSURANCE (37°C-24 HRS)

Productivity control

S.aureus ATCC 6538: growth

Selectivity control

S.epidermidis ATCC 12228: partially inhibited

E.coli ATCC 25922: inhibited

STORAGE

Dehydrated medium: 10-30°C

User prepared tubes: 1 month at 2-8°C

REFERENCES

- AOAC (1995) - Official Methods of Analysis, 16th Edition, ch. 17, pp. 32-33.
- FDA (1995) Bacteriological Analytical Manual, 8th ed. Revision A, 1998. Published by AOAC International.

PACKAGING

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Tryptic Soy Broth with NaCl 10%, and Sodium Pyruvate 500g (3.8 l)