

TRYPTONE SULFITE NEOMYCIN (TSN) AGAR

For the detection of sulphite reducing anaerobic bacteria in food

TYPICAL FORMULA (g/l)

Tryptone	15.00
Yeast Extract	10.00
Sodium Sulfite	1.00
Fe-Ammonium Citrate	0.50
Neomycin Sulfate	0.05
Polymyxin B Sulfate	0.02
Agar	13.50

DIRECTIONS

Suspend 40g in 1000ml of cold distilled water. Heat to boiling with frequent agitation, distribute 20ml in 20x200mm tubes or flasks and autoclave at 115°C for 20 minutes.

Final pH 7.2 ± 0.2

DESCRIPTION

Tryptose Sulphite Neomycin (TSN) Agar is used for the isolation and enumeration of sulphite reducing anaerobic bacteria, mainly *Clostridium perfringens*, in foodstuff. Neomycin and polymeric B inhibit the growth of *Enterobacteriaceae* and partially of *C. bifermentas*. The presence of ferric citrate and sodium sulphite allow detection of the hydrogen sulphide producing strains, which develop a black iron sulphide precipitate around the colonies.

TECHNIQUE

Cool the autoclaved medium in tubes at 48-50°C. Heat the sample in order to destroy vegetative cells and activate the spores. Add 1ml of the tenfold dilutions of the sample to the tubes, avoiding any contact with air. Mix the inoculum well by inversion, cooling it in an ice water bath, and incubate at 46°C for 24 hours. Sulphite reducing bacteria grow with colonies surrounded by a black halo

USER QUALITY ASSURANCE (37°C - 24 hrs - Anaer.)

Productivity control

C.perfringens ATCC 13124: growth, black colonies

C.sporogenes ATCC 19404: growth, black colonies

Selectivity control

E.coli ATCC 25922: inhibited

STORAGE

Dehydrated medium: 2-8°C

Complete medium: use the same day of preparation

REFERENCE

- Mossel, D.A.A., (1959) Enumeration of sulfite reducing clostridia in foods. J. Sci. Food Agr. 662-669

PACKAGING

4021592

Tryptone Sulfite Neomycin (TSN) Agar

500g (12.5 l)