Tryptone Sulfit Neomycin Agar (TSN)

For the selective isolation of Clostridium perfringens from foods and other material

Formula in grams per liter:

Casein Peptone	15,00	Yeast Extract	10,00
Sodium Sulfite	1,00	Ferric Citrate	0,50
Neomycin Sulfate	0,02	Polymixin Sulfate	0,05
Bacteriological Agar	13,50		

Final pH: 7,0 ± 0,2 at 25 °C

Preparation:

Suspend 40 grams of the medium in one litre of distilled water mix .Mix well. Heat with frequent agitation and boil for one minute. Dispense and sterilize at 118°C (12 lbs. sp.) for 10 minutes. **DO NOT OVERHEAT**. Cool to 45-50°C.

Uses:

TSN Agar can be used in tubes or plates for the identification and enumeration of C. perfringens in foods and other materials, especially from mixed contaminating flora.

Incubation at 46°C makes the medium very selective while neomycin inhibits the growth of the majority of enterobacteria and C. bifermentens (partially). Use an anaerobic jar for incubation if possible.

Read within half an hour after taking plates out of the jars and observe for black colonies which can lose their color by oxidation in air after this time period.

Microbiological Tests:

Microorganisms	Growth	Colony color
Clostridium perfringens ATCC 10543	Satisfactory	Black
Clostridium perfringens ATCC 13124	Satisfactory	Black
Escherichia coli ATCC 25922	Inhibited	-
Pseudomonas aeruginosa ATCC 27853	Inhibited	-