

## TRYPTIC SOY BROTH MODIFIED

Selective liquid medium for the enrichment of *E.coli* O 157

**TYPICAL FORMULA (g/L)**

Pancreatic Digest of Casein	17.00
Soy Peptone	3.0
Sodium Chloride	5.0
Dipotassium Hydrogen Phosphate	4.0
Glucose	2.5
Bile Salts No. 3	1.5

**DIRECTIONS**

Suspend 33 g in 1000 mL of cold distilled water; heat to boiling distribute 225 mL into flasks of suitable capacity and sterilise by autoclaving at 121°C for 15 minutes. Cool to approximately 45-50°C and to each 225 mL flask add, under aseptic conditions, 2.25 mL of Novobiocin Antimicrobial Supplement (REF 4240045), reconstituted with 5mL of sterile distilled water. Final concentrations: 4.5 mg/225 mL – 20 mg/litre.

Final pH 7.4 ± 0.2

**DESCRIPTION**

Tryptic Soy Broth Modified with Novobiocin (m-TSB+N) is recommended by ISO 16654 for the preparation of initial suspension of the sample and for the enrichment procedure for the detection of *E.coli* O157 in foodstuffs.

**TECHNIQUE**

Add 25 g of sample to 225 mL of m-TSB+N warmed to 41 +/- 1°C. Incubate at 41 ± 1°C for 6 hours and subsequently for a further 12-18 hours. Perform the immuno-magnetic separation on the enriched culture after 6 and 12-18 hours of incubation. Transfer 50 µl of resuspended immuno-magnetic particles to a plate of Tellurite Cefixime Mac Conkey Sorbitol Agar and to a second isolation medium (e.g. Chromogenic *E.coli* O157 Agar, REF 405581). Streak out the particles and incubate the plates at 35 or 37°C for 18-24 hours. Select 5 typical colonies and perform the latex agglutination test for confirmation or other confirmation tests according to ISO 16654.

**USER QUALITY CONTROL** (41°C-24 hrs)

Productivity Control: *E.coli* O157 ATCC 43894, growth

Selectivity control: *S.aureus* ATCC 25923, inhibited

**STORAGE**

Dehydrated medium: 10-30°C

User prepared flasks with novobiocin: use the same day of preparation

User prepared flasks without novobiocin: 1 month at 2-8°C

**REFERENCE**

- ISO 16654:2001 - Microbiology of food and animal feeding stuffs -- Horizontal method for the detection of *Escherichia coli* O157

**PACKAGING**

Dehydrated medium

**402155M2**      **Tryptic Soy Broth Modified (m-TSB)**      **500 g (15.1 L)**

Selective supplement

**4240045**      **Novobiocin Antimicrobial Supplement**      **10 x 500 mL**

Ready to use flasks

**512155M3**      **Tryptic Soy Broth Modified (m-TSB)+Novobiocin**      **6x225 mL**