

MODIFIED TRYPTONE SOYA BROTH (mTSB)

Medium for selective enrichment of *Escherichia coli* O157 from food or faecal sample.

TYPICAL FORMULA (g/l)

Pancreatic digest of casein	17.0
Papaic digest of soybean meal	3.0
Sodium Chloride	5.0
Glucose	2.5
Dipotassium Phosphate	4.0
Bile Salts	1.5
Final pH 7.4 ± 0.2	

DESCRIPTION

MODIFIED TRYPTONE SOYA BROTH (mTSB) is a medium for selective enrichment of *Escherichia coli* O157 from food or faecal sample.

PRINCIPLE

Pancreatic digest of casein and papaic digest of soybean meal are a source of nitrogen and carbon. Glucose is a source of energy easily available for microorganisms. Sodium chloride maintains the osmotic balance of the medium. Dipotassium phosphate is the buffer which maintains the pH of the medium. Bile salts are selective agents against Gram positive microorganisms. **MODIFIED TRYPTONE SOYA BROTH (mTSB) can be used with VCC SELECTIVE Supplement which increases selectivity of the medium.**

PREPARATION

Suspend 33.0 g of powder in 1 litre of deionized or distilled sterile water. Heat to boiling until completely dissolved. Dispense into final containers. Sterilize in autoclave at 121°C for 15 minutes. Allow the medium to cool to 45-50°C before adding the selective supplement as appropriate.

TECHNIQUE

1. Before use keep the tubes at room temperature or at 36±1°C.
2. Open the tubes immediately before inoculating and discard all the opened tubes which have not been used.
3. Inoculate the specimen using a sterile loop and immediately close the tube.
4. Incubate at 36±1°C for 24 hours.

INTERPRETATION OF RESULTS

Turbidity in the broth is the sign of bacterial growth.

STORAGE

10-30°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. The product must be used only by properly trained operators.

DISPOSAL of WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

1. Doyle, M. P. and J. L. Schoeni (1987) Applied Environmental Microbiology **53**: 2394-2396.
2. Szabo R. E. et al. (1990) Applied Environmental Microbiology **56**: 3546-3549.
3. Desmarchelier, P. M. and Grau, F. H. (1997) *Escherichia coli*. In: Foodborne Microorganisms of Public Health Significance. 5th Edition. pp.231-264. A. D. Hocking (Ed.). AIFST (NSW Branch) Food Microbiology Group, Australia.
4. ISO 10560 : 1993.



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PRODUCT SPECIFICATIONS

NAME

MODIFIED TRYPTONE SOYA BROTH (mTSB)

PRESENTATION

Dehydrated medium.

PACKAGING

Code	Content	Packaging
610352	500 g	500 g of powder in plastic bottle
620352	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM

7.4 ± 0.2

USE

MODIFIED TRYPTONE SOYA BROTH (mTSB) is a medium for selective enrichment of *Escherichia coli* O157 from food or faecal sample.

TECHNIQUE

Refer to technical sheet of the product.

APPEARANCE OF THE MEDIUM

Straw colored, free flowing powder.

Straw colored solution.

SHELF LIFE








4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
Inoculum for productivity: 10-100 UFC/ml
Inoculum for selectivity: 10^4 - 10^5 UFC/ml
Inoculum for specificity: $\leq 10^4$ UFC/ml
Incubation conditions: 24 h at $36 \pm 1^\circ\text{C}$

Microorganism		Growth
<i>Neisseria meningitidis</i> *	ATCC 13090	fair
<i>Staphylococcus epidermidis</i>	ATCC 12228	good
<i>Streptococcus pneumoniae</i>	ATCC 6303	good
<i>Streptococcus pyogenes</i>	ATCC 19615	good

TABLE OF SYMBOLS

LOT	Batch code	 Do not reuse	 Manufacturer	 Contains sufficient for <n> tests	 Temperature limitation
REF	Catalogue number	 Fragile, handle with care	 Use by	 Caution, consult accompanying documents	



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