

MULLER KAUFFMANN TETRATHIONATE BROTH ISO FORMULATION (MKTTn)

Ready to use flasks for the enrichment of *Salmonella* spp. in foodstuffs

TYPICAL FORMULA (g/l)

Enzymatic Digest of Meat	4.30
Enzymatic Digest of Casein	8.60
Sodium Chloride	2.60
Calcium Carbonate	38.70
Sodium Thiosulphate Anhydrous	30.30*
Ox Bile	4.78
Brilliant Green	9.50 mg
Iodine	4.00
Potassium iodide	5.00
Brilliant Green	9.60 mg
Novobiocin	40.00 mg

*equivalent to 47.8 g of Sodium Thiosulphate Pentahydrate

final pH 8,0 ± 0,2

TECHNIQUE

The procedure recommended by ISO 6579:2002, is as follow:

Add 25g sample portion to 225ml of Buffered Peptone Water. If the required test portion is other than 25g, use a suitable quantity of Buffered Peptone Water to yield approximately 1/10 dilution (m/v).

Incubate the initial suspension at 37°C for a minimum of 16 hours and not more than 20 hours.

Transfer 0.1ml of the pre-enriched culture to a tube containing 10ml of Rappaport Vassiliadis Soy (RVS) Broth and 1ml to a flask containing 10ml of MKTTn.

Incubate the inoculated RVS Broth at 41.5°C +/- 1°C for 24hrs ± 3hrs.

Incubate the inoculated MKTTn at 37°C ± 1 for 24hrs ± 3.

Using a culture obtained from the RVS Broth inoculate by means of a 3mm loop; a large-size Petri dish or two 90mm Petri dishes containing XLD Medium (ref.n° 402206), proceed in the same way from the enrichment tube by inoculating a second plating medium (e.g. Chromogenic Salmonella Agar -ref. n° 405350), or another suitable selective *Salmonella* plating-out medium chosen by the laboratory).

Using the cultures obtained in MKTTn after 24 hours of incubation, repeat the procedure with the same two selective plating-out media.

Invert the dishes and incubate at 37°C for 24hrs. ± 3 hrs.

Examine for the presence of typical colonies. For confirmation take from each dish of each selective medium at least one typical or suspected colony and a further 4 colonies if the first is negative. Streak the selected colonies onto the surface of Nutrient Agar and incubate at 37°C for 24hrs. Use pure cultures for biochemical and serological confirmation. Biochemical confirmation tests include: TSI Agar, Urea Agar, L-Lysine Decarboxylase Medium, detection of β-galactosidase, VP reaction, indole detection. Serological confirmation includes the detection of the presence of *Salmonella* O-, Vi- and H antigens by slide agglutination test.

Biochemical confirmation can be substituted with the rapid test MUCAP (code 191500). All the colonies MUCAP positive must be serologically confirmed.

STORAGE

Prepared flasks: 2-8°C

REFERENCES

- ISO 6579:2002 – Microbiology of food and animal feeding stuffs - Horizontal method for the detection of *Salmonella* spp.
- ISO 6579:2002/Cor.1:2004

PACKAGING

5117452

M.K. Tetrathionate Broth ISO Form.

6x 100 ml ready to use flasks