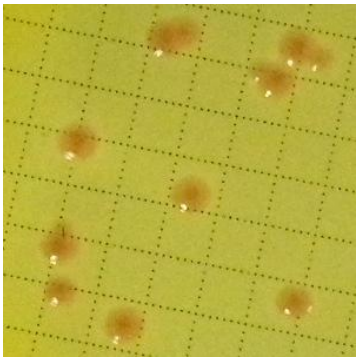
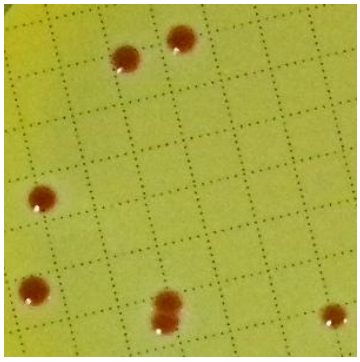
Tergitol + TTC Agar

Selective medium for detection, differentiation and enumeration of *E. coli* and coliforms , according to ISO 9308-1.

TYPICAL FORMULA	(g/l)
Lactose	20.0
Peptone	10.0
Yeast Extract	6.0
Meat Extract	5.0
Bromothymol Blue	0.05
Agar	15.0
Triphenyltetrazolium Chloride (TTC)	0.025
Sodium Heptadecylsulfate (Tergitol 7)	0.1
Final pH 7.2 ± 0.1	



Escherichia coli



Salmonella Typhimurium

DESCRIPTION

Tergitol + TTC Agar is a selective differential medium recommended by ISO 9308-1 for the detection and enumeration of *Escherichia coli* and other coliform bacteria from water by membrane filtration technique.

PRINCIPLE

Peptone and meat extract are sources of nitrogen, carbon and amino acids. Yeast extract supplies B-group vitamins that stimulate bacterial growth. Lactose is the fermentable carbohydrate. Bromothymol blue is the pH indicator. Tergitol 7 inhibits the growth of Gram-positive bacteria thus allowing for superior recovery of coliforms. Agar is the solidifying agent. TTC is a colorless compound that can be reduced to formazan, a red compound.

TECHNIQUE

Membrane Filtration Method

1. Filter two 100 ml aliquots of the water sample through two sterile membranes.
2. Place the membranes upon two plates of Tergitol + TTC Agar.
3. Incubate one plate at 37°C for 24 h (total coliforms) and the other one at 44°C for 16-24 h (*Escherichia coli*).

INTERPRETATION OF RESULTS

Escherichia coli cultivates with yellow-orange colonies on yellow medium.
Enterobacter/Klebsiella cultivate with yellow colonies on yellow medium.
Salmonella/Shigella/Proteus/Pseudomonas cultivate with dark red colonies on green-blue medium.

STORAGE

10-25°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 does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

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

REFERENCES

1. Tartoff, K.D., and C.A. Hobbs. (1987). Bethesda Research Laboratories Focus.9: 12.
2. Sambrook, J., E.F. Fritsch, and T. Maniatis. (1989). Molecular cloning: a laboratory manual, 2nd ed.
3. Chapman, G.H. (1947). J. Bact. 53: 504.
4. ISO 9308-1: 2000. Water quality – Detection and enumeration of Escherichia coli and coliform bacteria – Part 1: Membrane filtration method.

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PRODUCT SPECIFICATIONS

NAME
Tergitol + TTC Agar

PRESENTATION
Ready-to-use plates (60 mm) containing 10 ± 1 ml of medium

STORAGE
10-25°C

PACKAGING

Ref.	Contents	Packaging
163492	20 plates	• 2 plates packed one by one in 1 blister pack • 5 blisters wrapped in 1 film thermally welded • satined white cardboard box with label
163492L	20 plates	• 10 plates in thermally soldered film • 2 x 10 plates in cardboard box

pH OF THE MEDIUM
7.2 ± 0.1

USE
Tergitol + TTC Agar is a selective differential medium recommended by ISO 9308-1 for the detection and enumeration of *Escherichia coli* and other coliform bacteria from water by membrane filtration technique

TECHNIQUE
Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM
Slightly opalescent, green, without precipitates

SHELF LIFE
6 months

QUALITY CONTROL
1. Control of general characteristics, label and print
2. Sterility control
   7 days at 22 ± 2°C, aerobically
   7 days at 35 ± 2°C, aerobically
3. Microbiological control
   Inoculum for productivity: 50-100 CFU
   Inoculum for selectivity: 10^4-10^6 CFU
   Inoculum for specificity: 10^3-10^4 CFU
   Incubation Conditions: aerobically, for 18-24 h at 36 ± 2°C

Microorganism		Growth	Colonies color	Medium color
Escherichia coli	WDCM 00179	Good	Yellow-orange	Yellow
Salmonella Typhimurium	ATCC® 14028	Good	Dark red	Green
Pseudomonas aeruginosa	WDCM 00025	Good	Red	Blue
Enterococcus faecalis	WDCM 00087	Inhibited	---	---

TABLE OF SYMBOLS

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

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