



## Easy Dry™ Tergitol

Selective medium for detection and enumeration of *Escherichia coli* and coliforms in water.

### DESCRIPTION

Liofilchem® Easy Dry™ are sterile, dehydrated culture media, impregnated upon absorbent pads. Each pad is preplated in a Petri dish and is immediately ready-to-use after being moistened with sterile distilled or deionized water. Easy Dry™ are optimal for the examination of large sample volumes by the membrane filter method.

Easy Dry™ Tergitol is a selective isolation medium used for the detection and enumeration of *Escherichia coli* and coliform bacteria in water, based on lactose fermentation.

Tergitol TTC agar (the corresponding agar medium which contains triphenyltetrazolium chloride as well) is described in ISO 9308-1:2000.

### TYPICAL FORMULA

Peptone

Meat Extract

Yeast Extract

Lactose

Bromothymol Blue

Tergitol® 7

Final pH 7.1 ± 0.2 at 25°C

Formula is based on the corresponding agar medium, adjusted to meet specific performance requirements.

### METHOD PRINCIPLE

Peptone and meat extract provide amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Yeast extract is a source of vitamins, particularly of B-group. Lactose is the fermentable carbohydrate.

Bromothymol blue is the pH indicator. Tergitol® 7 (sodium heptadecylsulfate) is a surfactant that inhibits Gram-positive bacteria and simultaneously suppresses the swarming of *Proteus* spp.

Fermentation of lactose is seen by a color change of the medium to yellow.

### PREPARATION

1. Cut open a bag and remove the number of Easy Dry™ plates needed.
2. Moisten the pad contained in the Petri dish with 2.2 ml of sterile distilled or deionized water.
3. Wait 5 minutes before using.

### TEST PROCEDURE

Filter the sample through a filter membrane (0.45 µm pore diameter). Transfer the membrane onto a plate containing a just rehydrated pad. Incubate aerobically at 36 ± 2°C for 18-24 hours.

### NOTES

If necessary, the incubation may be extended for up to 48 hours.

To limit the secondary flora while promoting growth of *E. coli*, it is possible to incubate another plate at 44°C.

### INTERPRETING RESULTS

Examine the membrane for growth and acidification of the medium (yellow) under the membrane:

- Colonies of *E. coli* and other lactose-fermenting organisms such as *Enterobacter* and *Klebsiella* show a yellow halo in the corresponding medium;
- Non-lactose fermenting organisms (e.g. *Salmonella*, *Shigella*, *Proteus*, *Pseudomonas*) show a green-blue color in the medium.

For confirmation, subculture selected colonies onto a non-selective agar and perform oxidase test and indole test. All coliform bacteria are oxidase-negative. Colonies that are oxidase-negative but indole-positive are counted as *Escherichia coli*.

### APPEARANCE OF THE MEDIUM

Whitish pad. Pale green once rehydrated.

**STORAGE**

Store at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

**SHELF LIFE**

2 years.

**QUALITY CONTROL**

The medium is inoculated with the microbial strains indicated in the QC table.

Inoculum for productivity: 50-100 CFU.

Inoculum for selectivity: 10<sup>4</sup>-10<sup>6</sup> CFU.

Incubation conditions: aerobically at 36 ± 2°C for 18-24 hours.

**QC Table.**

Microorganism	Specification	
<i>Escherichia coli</i>	ATCC® 25922	Good growth, yellow color in the medium
<i>Enterococcus faecalis</i>	ATCC® 19433	Inhibition
<i>Salmonella Typhimurium</i>	ATCC® 14028	Good growth, green-blue color in the medium

**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 intended for professional use only and must be used by properly trained operators.

**DISPOSAL OF WASTE**

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

**BIBLIOGRAPHY**

1. EN ISO 11133:2014+Amd1:2018. Microbiology of food, animal feed and water – Preparation, production, storage and performance testing of culture media.
2. ISO 9308-1:2014. Water quality – Enumeration of *Escherichia coli* and coliform bacteria – Part 1: Membrane filtration method for waters with low bacterial background flora.
3. ISO 9308-1:2000. Water quality – Detection and enumeration of *Escherichia coli* and coliform bacteria – Part 1: Membrane filtration method.
4. Sambrook, J., E.F. Fritsch, and T. Maniatis (1989) Molecular cloning: a laboratory manual, 2nd ed.
5. Tartoff, K.D., and C.A. Hobbs (1987) Bethesda Research Laboratories Focus.9: 12.
6. Chapman, G.H. (1947) J. Bact. 53: 504.









**PRESENTATION****Packaging****Ref.**

Easy Dry™ Tergitol

100 pads

87517

**TABLE OF SYMBOLS**

<b>LOT</b> Batch code	 Keep away from sunlight	 Manufacturer	 Use by	 Fragile, handle with care
<b>REF</b> Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult Instruction For Use	 Do not reuse

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