



Easy Dry™ Streptococcal KF + TTC

Selective medium for detection and enumeration of enterococci from water and food samples.

DESCRIPTION

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

Easy Dry™ Streptococcal KF + TTC is a medium used for the selective isolation and enumeration of faecal streptococci (enterococci) according to the recommendations of the APHA for the examinations of surface waters and foods.

TYPICAL FORMULA	(g/l)
Proteose Peptone	10.0
Yeast Extract	10.0
Sodium Chloride	5.0
Sodium Glycerophosphate	10.0
Maltose	20.0
Lactose	1.0
Sodium Azide	0.04
Bromcresol Purple	0.015
2,3,5-Triphenyltetrazolium Chloride (TTC)	0.1
Final pH 7.2 ± 0.2 at 25°C	

METHOD PRINCIPLE

Proteose peptone provides amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Yeast extract is a source of vitamins, particularly of B-group. Sodium chloride maintains the osmotic balance of the medium. Sodium glycerophosphate is a buffering agent. Maltose and lactose are fermentable carbohydrates. Sodium azide inhibits Gram-negative bacteria. Bromcresol purple is the pH indicator. TTC is reduced to formazan by the enterococci. This reaction is seen by the formation of red to maroon colonies.

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 35 ± 2°C for 46-48 hours.

INTERPRETING RESULTS

Typical colonies of faecal enterococci show red to pink center. All such colonies should be counted and reported as fecal enterococci per volume of sample.

APPEARANCE OF THE MEDIUM

Turquoise pad. Slightly darker 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 plates are inoculated with the microbial strains indicated in the QC table.

Inoculum for productivity: 50-100 CFU.

Inoculum for selectivity: 10⁴-10⁶ CFU.

Incubation conditions: aerobically at 35 ± 2°C for 46-48 h.

QC Table.

Microorganism		Growth	Specification
<i>Enterococcus faecalis</i>	ATCC® 19433	Good	Colonies with red to pink center
<i>Enterococcus faecalis</i>	ATCC® 29212	Good	Colonies with red to pink center
<i>Escherichia coli</i>	ATCC® 25922	Inhibited	---

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. American Public Health Association (1998) American Water Works Association and Water Pollution Control Federation: Standard Methods for the Examination of Water and Wastewater. 20th ed. Washington, D.C.
2. American Public Health Association (1992) Compendium of methods for the microbiological examination of foods. 3rd ed.
3. Kenner B.A., Clark H.F. and Kabler F.W. (1960) Faecal streptococci. II. Quantification of streptococci in faeces. Am J Publ. Health 50:1553-1559.
4. Kenner B.A., Clark H.F. and Kabler F.W. (1961) Faecal streptococci. I. Cultivation and enumeration of streptococci in surface waters. App Microbiol 9:15-20.

PRESENTATION

Contents	Ref.
Easy Dry™ Streptococcal KF + TTC 60 mm ready-to-use plates	100 plates 87509

TABLE OF SYMBOLS

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



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