

STREPTOCOCCAL KF AGAR

Selective medium for faecal streptococci isolation and enumeration in water and food samples

TYPICAL FORMULA (g/L)

Peptocomplex.....	10.0
Yeast Extract.....	10.0
Sodium Chloride.....	5.0
Sodium Glycerophosphate.....	10.0
Sodium Azide.....	0.4
Bromcresol Purple.....	0.015
Maltose.....	20.0
Lactose.....	1.0
Agar.....	16.0
Final pH	7.2 ± 0.2

DESCRIPTION

STREPTOCOCCAL KF AGAR is a selective medium, for faecal streptococci isolation and enumeration in water and food samples

PRINCIPLE

Peptospecial provides a source of amino acids and proteins. Yeast extract provides vitamins and other growth factors. Maltose and lactose are a source of energy. Sodium chloride maintains the osmotic balance. Sodium azide is a selective agent. Bromcresol purple is an indicator dye. Agar is the solidifying agent. TTC is used as a redox indicator: it is colorless in the oxidized form and is reduced to formazan, an insoluble red pigment, by actively growing microbial cells. The reduction of TTC is irreversible.

PREPARATION

Dissolve the contents of the bottle in a boiling water bath at 100 ° C (with the cap slightly unscrewed) until complete dissolution of the medium. Check the good homogeneity of the medium turning the bottle. If necessary, put again the bottle in a water bath to get the full melting. Cool to 45-50 °C. Aseptically add 1 mL of T.T.C. 1% Supplement (code 80300). Mix well with no bubbles and pour into Petri plates in aseptic conditions. Allow to carefully dry the plates to avoid condensation that may contribute to contamination of the medium. Store plates upside down in boxes or in sealed polythene bags.

TECHNIQUE

Membrane Filter Method

1. Filter samples (or appropriate dilution) through a 0.45 µm sterile membrane, according to the degree of pollution expected to give 20-200 colonies.
2. Incubate at 36 ± 1°C for 18-48 hours.

For solid samples transfer the membrane on the surface of STREPTOCOCCAL KF AGAR, invert the plate and streak the sample to examine, omogenized and diluted with saline solution onto the surface of the medium, and incubate at 36 ± 1°C for 18-48 hours.

INTERPRETATION OF RESULTS

Faecal streptococci cultivate with red pink colonies. Confirm suspect colonies by biochemicals test.

STORAGE

10-25°C away from light, until the expiry date indicated 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

2. APHA (1985). *Standard methods for Examinations of Water and Waste- water*, 16th edition
3. FDA (1976). *Bacteriological Analytical manual of Foods*, 4th Edition
4. Hartman, P.A., Reinbold G.W., & Saraswat, D.S. (1966). *Adv. App. Micr.*, 8, 253.
1. Kenner, B.A., Clark, H.F. & Kabler, P.W. (1961). *Appl. Microbiol.*, 9, 15.



LIOFILCHEM s.r.l.

Via Scozia Zona Ind.le - 64026 Roseto D.A. (TE) - Italy

Tel. +390858930745 Fax +390858930330 Website: www.liofilchem.net E-Mail: liofilchem@liofilchem.net

PRODUCT SPECIFICATIONS

NAME

STREPTOCOCCAL KF AGAR

PRESENTATION

Glass bottles containing 100 ml of broth.

STORAGE

10-25°C

PACKAGING

Code	Content	Packaging
402150	6 bottles x 100 ml	6 bottles in cardboard box

pH OF THE MEDIUM

7.2 ± 0.2

USE

STREPTOCOCCAL KF AGAR is a selective medium, for faecal streptococci isolation and enumeration in water and food samples.

TECHNIQUE

Refer to technical sheet of the product.

APPEARANCE of the MEDIUM

Purple medium, slightly opalescent.

SHELF LIFE







2 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Sterility control
7 days at 25 ± 1°C, in aerobiosis
7 days at 36 ± 1°C, in aerobiosis
- Microbiological control
Inoculum for productivity: 10-100 CFU/ml
Inoculum for selectivity: 10⁴-10⁵ CFU/ml
Inoculum for specificity: ≤ 10⁴ CFU/ml
Incubation conditions: 18-48 hours at 36 ± 1°C, in anaerobiosis

Microorganisms		Inoculum CFU	Recovery	Color of colonies
<i>Enterobacter aerogenes</i>	ATCC 13048	3x10 ² -10 ³	Inhibition	-
<i>Enterococcus faecalis</i>	ATCC 19433	30-300	Good	Red - pink
<i>Enterococcus faecalis</i>	ATCC 29212	30-300	Good	Red - pink
<i>Escherichia coli</i>	ATCC 25922	3x10 ² -10 ³	Inhibition	-

TABLE of SYMBOLS

LOT Batch code	 Temperature limitation	 Manufacturer	 Contains sufficient for <n> tests
REF Catalogue number	 Keep away from heat	 Use by	 Caution, consult accompanying documents



LIOFILCHEM s.r.l.

Via Scozia Zona Ind.le - 64026 Roseto D.A. (TE) - Italy

Tel. +390858930745 Fax +390858930330 Website: www.liofilchem.net E-Mail: liofilchem@liofilchem.net

