

HiTouchTMColiconfirm Agar Flexi PlateTM

FL045

Intended use

Recommended for selective isolation and identification of *E.coli* and coliforms from water samples

Composition**

Ingredients	Gms / Litre
Tryptone	8.000
Yeast extract	0.500
Growth factors	2.20
Buffers	3.30
Selective mix	1.52
Chromogenic mixture	3.95
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Open the lid and carefully lift up the enclosed prepared medium plate so as to avoid touching the agar surface by hand. to avoid touching the agar surface by hand. Touch the surface of agar plate onto the surface to be tested. Gently press the plate manually for upto 10 seconds. Apply constant and uniform pressure to the whole surface. Replace exposed medium plate back in the base plate. Close the lid. Press the sides of the lid to make sure that it is fixed in the grooves. Disinfect the surface where the sample was taken in order to remove any possible traces of agar. Incubate the plates at specified temperature. After incubation as recommended count the number of colonies which have appeared on the surface of medium.

Recommended counting range for the Flexiplates is 10-100 (CFU). The number of colonies from each sample is expressed in colony forming units (CFU) extrapolated to 100 cm² of the surface sampled.

Alternative Methods of inoculation :

To use as Culture plate (ii) , Sample dilution plate (iii) or Swabbing plate (iv)

The plates can be used for determination of microbial levels in liquids and fluids by dropping of 0.01 ml of sample dilution onto the medium surface.

It is also possible to inoculate this plates by moistened swab after wiping off the sample area. In case of surface with heavy contamination/ surfaces not suitable for contact plates, the swab rinse method may be used, where the swab- rinse method may be used, where the moistened swab after stroking the sample area is dipped in sterile saline and agitated. A specified amount i.e. 0.01 ml of this rinse fluid or its dilution is dropped on the surface of Flexiplates.

To use as Gravitation Settling Plate

It is also suitable for determination of airborne microorganisms in room air and other environments by gravitation settling of viable particles.

Principle And Interpretation

It is possible to remove bacteria from fluids by passing them through filters with such small pore size that bacteria are arrested. This filtration technique enables fairly large volumes of water to pass rapidly under pressure, but prevents the passage of any bacteria present. These nutrients are retained on the surface of the membrane which is then brought into contact with suitable liquid nutrients.

Escherichia coli, a member of the family *Enterobacteriaceae* is a normal flora of the intestinal tract of humans and a variety of animals. Although most of the *E.coli* does not cause gastrointestinal illness, certain groups of *E.coli* can cause life threatening diarrhoea and severe disability. For water testing, detection of *E.coli* and total coliforms is very important. There are various media available for the detection of *E.coli* and total coliforms.

Tryptone, growth factors provide nitrogenous and carbonaceous compound, long chain amino acids, vitamins and other essential nutrients. Phosphates buffers the medium well. Selective agents inhibit gram positive bacteria and other accompanying bacteria. The chromogenic mix incorporated in the medium aids in the detection of β -glucuronidase positive organisms which gives blue coloured organisms.

Type of specimen

Water samples.

Specimen Collection and Handling

Refer direction

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

The level of microorganisms recovery varies according to the characteristics of the surfaces and its adhesive properties (rough or smooth surfaces). HiTouch™ FlexiPlate™ is a qualitative technique for the monitoring of surface biocontamination. Taking into account the inherent inaccuracy of biological collections, it is important to use the same method of collection for all samples.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Sterile plastic plate containing Light blue coloured firm gel

Quantity of Medium

9 ml of gel in plastic plate

Reaction

Reaction of medium is pH 7.00-7.40

Sterility Test:

Sterility of the medium was checked for 14 days. Medium was found sterile without any colony formation on surface of solid medium.

Cultural Response

Cultural characteristics was observed after incubation at 35-37° C for 18-24 hours.

