

## Specification

Sterile selective supplement used for isolation of *E.coli* O157 from food and clinical samples.

## Presentation

10 Freeze dried vials  
Vial  
with: 3 ± 0.1 g

### Packaging Details

23x60 mm glass vials, tag labelled, White plastic cap - 10 vials per box.

### Shelf Life

49 months

### Storage

2-25 °C

## Composition

Composition (vial):

Cefixime..... 0.025 mg

Potassium tellurite..... 1.250 mg

Reconstitute the original freeze-dried vial

with:

sterile distilled water..... 6 ml

## Description /Technique

### Description:

The principal cause of haemorrhagic colitis, and others significant human illnesses characterised by bloody diarrhoea and severe abdominal pain, is suppose to be *Escherichia coli* O157. The selectivity is due to the high level of potassium tellurite who separates *serogroup* O157 from other *E. coli* serogroups and inhibits *Providencia* and *Aeromonas* spp. Cefixime is inhibitory to *Proteus* spp.

Instead of the majority *E. coli* strains, this microorganism does not ferment sorbitol producing colourless colonies (brownish-yellow) in A. MacConkey Sorbitol.

### Technique:

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

Reconstitute the vial with 6 ml to the sterile diluent (distilled water) in aseptic conditions and add it to 500 ml of any melted Agar base cooled to 50°C. Do not overheat once supplemented.

Pour the complete medium into Petri dishes and, once solidified on a flat surface, spread the plates either by streaking or by spiral method.

Incubate the plates in aerobic atmosphere at 37 ± 1 °C for 21 ± 3h.

(Incubation times, temperature and sample volumes may vary depending on the sample, on the specifications,...)

After incubation, count all the colonies that have appeared onto the surface of the agar.

Presumptive isolation / recovery of *E.coli* O157 must be confirmed by further microbiological and biochemical tests.

## Quality control

### Physical/Chemical control

Color : Off-white

pH: at 25°C

### Microbiological control

Add 1 vial to 500 ml of medium base. DO NOT HEAT once supplemented.

Inoculate: Practical range 100 ± 20 CFU. min. 50 CFU (productivity)/ 10<sup>4</sup>-10<sup>6</sup> (selectivity).

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Distribute the complete medium, cooled to 50 °C, into 90 mm plates

Aerobiosis. Incubation at 37 ± 1 °C, reading after 21 ± 3 h

### Microorganism

*E. coli* O157:H7 (non toxg.) ATCC® 700728 WDCM 00014

*Escherichia coli* ATCC® 8739, WDCM 00012

*Staphylococcus aureus* ATCC® 6538, WDCM 00032

*Escherichia coli* ATCC® 43888

*Stph. aureus* ATCC® 25923, WDCM 00034

### Sterility Control

Add 5 ml of the sample to:

100 ml TSB and 100 ml Thioglycollate.

Incubation 48 h at 30-35 °C and 48 h at 20-25 °C: NO GROWTH.

### Growth

Good. Colourless colonies (brownish-yellow)

Partial Inhibition- Red colonies

Inhibited

Poor to good. Transparent colonies (Brown-yellowish)

Inhibited

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