

## Specification

A sterile selective supplement for the isolation of *Listeria* species.

## Presentation

	Packaging Details	Shelf Life	Storage
10 Freeze dried vials Vial with: $3 \pm 0.1$ g	22±0.25 x 55±0.5 mm glass vials, tag labelled, White plastic cap - 10 vials per box.	49 months	2-25 °C

## Composition

Composition (g/vial)

Sodium Nalidixate.....	0.0100
Acriflavine.....	0.0125
Ferric Ammonium Citrate.....	0.2500

**NOTE :** Each vial is sufficient to supplement 500 ml of medium Base: Fraser Borth Base.

Reconstitute the original freeze-dried vial  
by adding  
Sterile Distilled Water..... 6 ml

## Description /Technique

### Description:

This supplement is added in Fraser broth base in order to obtain a secondary enrichment complete medium. This medium is a modification of the UVM broth. It gives better results in the detection rate of *Listeria monocytogenes* in meat products and has the added advantage of only taking 3-4 days.

### 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 of the sterile diluent in aseptic conditions and add it to 500 ml of sterilized Broth base cooled to 50°C.

Do not overheat once supplemented.

Pour the complete medium into tubes and inoculate.

Incubate the tubes in aerobic atmosphere at  $37 \pm 1^\circ\text{C}$  for 24±2h.

Incubation times longer than those mentioned above or different incubation temperatures may be required depending on the sample or the specifications.

After incubation, the isolation is carried out on *Listeria* agar according to Ottaviani & Agosti and a second selective agar for *Listeria*, eg Oxford, Palcam, or any other selective agar.

In these media, the colonies that present blackening due to the hydrolysis of esculin are presumptively typical strains of *Listeria*.

## Quality control

### Physical/Chemical control

Color : Yellowish-brown

### Microbiological control

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

Inoculate 30-300 CFU (productivity) 1.000-10.000 CFU (selectivity)

Aerobiosis. Incubation at  $35^\circ\text{C} \pm 2^\circ\text{C}$ , reading at 24-48 hours

### Microorganism

*L. monocytogenes* ATCC® 13932, WDCM 00021

*Escherichia coli* ATCC® 25922, WDCM 00013

*L. monocytogenes* ATCC® 35152, WDCM 00109

### Growth

Good. Black medium. Positive esculine

Inhibited. Confirm in TSA at  $37^\circ\text{C} \pm 1^\circ\text{C}$  reading 24 ± 3h

Good. Black medium. Positive esculine

### Sterility control

Add 5ml of the sample to 100 ml of TSB and to 100 ml Thioglycollate.

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

Check at 7 days after incubation in same conditions.

## **Bibliography**

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