

## 59859 PALCAM Listeria Selective Enrichment Broth, Vigitone (Vigitone PALCAM Listeria Selective Enrichment Broth)

This PALCAM Listeria Selective Enrichment Broth contains plant peptone instead of animal derived peptone. With added supplement it is recommended for selective enrichment and identification of *Listeria* species. It is also mentioned below the ISO specification 11290-1:1996.

### Composition\*\*:

Ingredients	Grams/Litre
Peptone (vegetable)	23.0
Yeast extract	5.0
Lithium chloride	10.0
Esculin	0.8
Ammonium ferric citrate	0.5
D-Mannitol	5.0
Soya lecithin	1.0
Polysorbate 80	2.0
Phenol red	0.08
Final pH (at 25°C)	7.4 ± 0.2

\*\* Formula adjusted, standardized to suit performance parameters

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Appearance of Powder: Pink coloured, homogeneous, free flowing powder.

Colour and Clarity: Red coloured, clear solution without any precipitate.

### Directions:

Suspend 23.7 g in 500 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add the dissolved contents of 1 vial of PALCAM Listeria Selective Supplement according to Van Netten et al. (02336). Mix well before dispensing.

### Principle and Interpretation:

Listeria Identification Broth also known as Polymyxin Acriflavin Lithium-chloride Ceftazidime Aesculin Mannitol (PALCAM) Broth is prepared as described by van Netten et al (1) for selective enrichment of *Listeria* species.

Peptone (vegetable) and yeast extract provide growth nutrients. High amount of lithium chloride and added selective supplement (2) inhibit accompanying microflora and allow the growth of *Listeria* species. Soya lecithin has similar properties as that of egg-yolk hence additional supplementation of egg-yolk emulsion is not required. After incubation of 24-48 hours at 30°C approximately 0.1 ml of the broth is streaked on Listeria Selective Agars such as PALCAM Listeria Selective Agar (75977) or Oxford Agar (75805). The combination of mannitol and phenol red helps the detection of mannitol fermentation while esculin and ammonium ferric citrate together help in detection of esculin hydrolysis.

Cultural characteristics after 24 - 48 hours at 30°C.

Organisms (ATCC)	Growth	Colour
<i>Listeria monocytogenes</i> (19118)	+++	black
<i>Staphylococcus aureus</i> (25923)	-	—
<i>Enterobacter faecalis</i> (29212)	-	—
<i>Micrococcus luteus</i> (10240)	-	—



References:

1. P. van Netten, et al, Int. J. Food. Microbiol., 8, 299 (1989)
2. A.M. Lund, J. Food Protect., 54, 602 (1991)

**Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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