

## Technical Information

### PSTA Enrichment MiVeg Broth Base

#### Product Code : VM1940

**Application:-** PSTA Enrichment MiVeg Broth Base is recommended for secondary enrichment of *Yersinia enterocolitica* from foods.

#### Composition

Ingredients	Gms / Litre
MiVeg peptone	1.0
Sucrose	1.0
Tris hydroxymethyl aminomethane	3.0
Brilliant green	0.0125
Sodium azide	0.192
Final pH (at 25°C)	8.3 ± 0.2

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

#### Principle & Interpretation

PSTA Enrichment MiVeg Broth Base is prepared by using vegetable peptones in place of animal based peptones thereby making the medium free from BSE/TSE risks. PSTA Enrichment MiVeg Broth Base is the modification of PSTA Enrichment Broth Base formulated in accordance with APHA (1). It is recommended for secondary or selective enrichment of *Yersinia enterocolitica*.

MiVeg peptone supplies nitrogenous compounds. Sucrose acts as the energy source. Tris hydroxymethyl aminomethane is the biological buffer. Sodium azide and Brilliant green imparts selectivity to the medium. Secondary enrichment medium has higher selectivity. PSTA Enrichment MiVeg Broth is inoculated from a cold enrichment medium e.g. PSB Enrichment MiVeg Broth and incubated at 28°C for 48 hours which is further inoculated on selective agar media as MacConkey MiVeg Agar (VM1081), SS MiVeg Agar (VM1108) and Yersinia Selective MiVeg Agar Base (VM1843).

#### Methodology

Suspend 5.2 grams of powder media in 1000ml distilled water. Mix thoroughly and 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 Ampicillin to a final concentration of 0.005 g/lit. Mix well before dispensing into sterile glass tube.

**Warning:** Sodium Azide has a tendency to form explosive metal azides with plumbing materials thus it is advisable to use enough water to flush off the disposables.

#### Quality Control

##### Physical Appearance

Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

##### Colour and Clarity of prepared medium

Greenish coloured, clear to slightly opalescent solution.

##### Reaction

Reaction of 0.52% w/v aqueous solution is pH 8.3 ± 0.2 at 25°C.

##### pH Range

8.1 - 8.5

### Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 30°C ± 2°C for 48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth
<i>Yersinia enterocolitica</i> (27729)	10 <sup>2</sup> -10 <sup>3</sup>	good-luxuriant

## Storage and Shelf Life

**Dried Media:** Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.

**Prepared Media:** 2-8° in sealable plastic bags for 2-5 day.



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1. Control

2. *Yersinia enterocolitica*

## Further Reading

1. Speck M (Ed.), 1984, Compendium of Methods for the Microbiological Examination of Foods, 2<sup>nd</sup> ed., APHA, Washington, DC.

## Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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