

## Technical Information

### MOX MiVeg Agar

#### Product Code : VM2167

**Application:-** Magnesium Oxalate (MOX) MiVeg Agar is recommended for the cultivation of *Yersinia enterocolitica* from food.

#### Composition

Ingredients	Gms / Litre
MiVeg hydrolysate	15.0
Papaic digest of soyabean meal	5.0
Sodium chloride	5.0
Magnesium chloride	4.067
Sodium oxalate	2.68
Agar	15.0
Final pH ( at 25°C)	7.5±0.2

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

#### Principle & Interpretation

MOX MiVeg Agar is prepared by using MiVeg hydrolysate in place of Casein enzymic hydrolysate making the medium BSE/TSE risk free. This medium is the modification of MOX Agar which is formulated as per APHA (1) for the cultivation of *Yersinia enterocolitica* a causative agent of human illness due to consumption of contaminated food (2). To prevent dehydration, contamination in transit and to protect handlers food samples are collected aseptically and are sealed in containers. In case of delay, refrigeration is preferable to freezing because the latter can result in cell injury. Acid foods and fermented products should be analyzed promptly because *Yersinia* is sensitive to acid conditions. *Yersinia* is a psychrotroph hence cold enrichment at 4°C has been commonly used as the incubation temperature. This medium contains MiVeg hydrolysate, Papaic digest of soyabean meal provide essential growth nutrients. Magnesium chloride and sodium oxalate enhances growth of *Yersinia enterocolitica*.

#### Methodology

Suspend 46.75 grams of powder media in 1000 ml distilled water. Mix thoroughly. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

#### Quality Control

##### Physical Appearance

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

##### Gelling

Firm, comparable with 1.5% Agar gel.

##### Colour and Clarity of prepared medium

Yellow coloured, clear to slightly opalescent gel forms in petri plates.

##### Reaction

Reaction of 4.68 % w/v aqueous solution pH: 7.5 ±0.2 at 25°C

##### pH range

7.3-7.7

##### Cultural Response/Characteristics

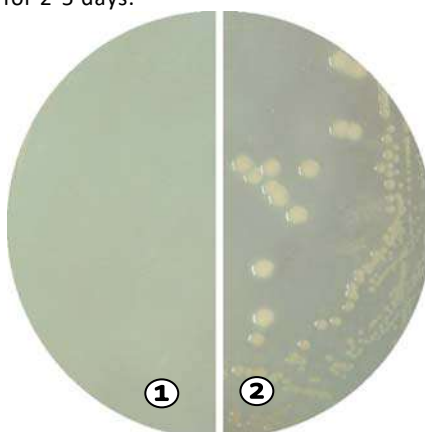
Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
<i>Yersinia enterocolitica</i> (27729)	10 <sup>2</sup> -10 <sup>3</sup>	good-luxuriant	>70%

## 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 days.



**VM2167 MOX MiVeg Agar**  
(Against dark background)

1. Control

2. *Yersinia enterocolitica*

## Further Reading

1. Vanderzant C, Splittstoesser DF (Eds.), 1992, Compendium of Methods For The Microbiological Examination of Foods, 3<sup>rd</sup> ed., APHA, Washington, D.C.

2. Bacteriological Analytical Manual, 1995, Food and Drug Administration, 8<sup>th</sup> ed., AOAC, International, USA.

### Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
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