

Technical Information

Clostridial MiVeg Agar

Product Code : VM1497

Application:- Clostridial MiVeg Agar is recommended for the selective isolation of pathogenic *Clostridia* from mixed flora.

Composition

| Ingredients | Gms / Litre |
|---------------------------------|-------------|
| MiVeg hydrolysate | 17.0 |
| Papaic digest of soyabean meal | 3.0 |
| Dextrose | 6.0 |
| Sodium chloride | 2.5 |
| Sodium thioglycollate | 1.8 |
| L-Cystine | 0.25 |
| Sodium formaldehyde sulfoxylate | 1.0 |
| Neomycin sulphate | 0.15 |
| Sodium azide | 0.2 |
| Agar | 14.5 |
| Final pH (at 25°C) | 7.0±0.2 |

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Clostridial MiVeg Agar is prepared by using vegetable peptones instead of animal based peptones which makes it BSE/TSE risk free. This medium is the modification of Clostridial Agar which is recommended for selective isolation of pathogenic *Clostridia* from mixed flora and recovery of *Clostridia* from clinical and nonclinical materials (1).

It contains a variety of nutrients and biochemicals which support the growth of *Clostridia*. MiVeg hydrolysate and Papaic digest of soyabean meal present in medium supplies the essential nutrients mainly the nitrogen compounds for the growth of *Clostridia*. Dextrose provides the carbon and fermentable carbohydrate source. L-Cystine, sodium thioglycollate and sulfoxylate act as the reducing agent which create favorable low O-R potential for growth of *Clostridial* species. A number of organisms including *Bacillus* species, enteric bacilli, *Proteus*, *Pseudomonas* and most of the cocci is inhibited by Neomycin & Sodium azide.

Methodology

Suspend 46.4 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.

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

Quality Control

Physical Appearance

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

Gelling

Firm, comparable with 1.45% Agar gel

Colour and Clarity of prepared medium

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

Reaction

Reaction of 4.64% w/v aqueous solution pH: 7.0 ±0.2 at 25°C

pH range

6.8-7.2

Cultural Response/Characteristics

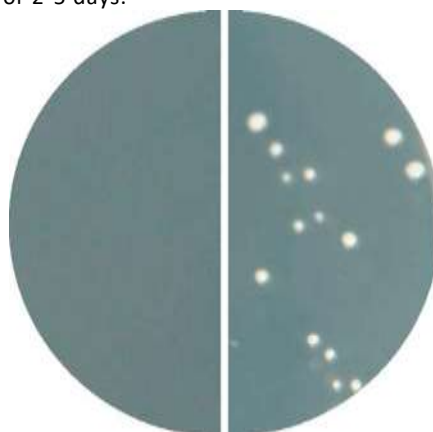
Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours

| Organisms (ATCC) | Inoculum (CFU) | Growth | Recovery |
|--|----------------------------------|-----------|----------|
| <i>Clostridium perfringens</i> (12924) | 10 ² -10 ³ | luxuriant | >50% |
| <i>Clostridium sporogenes</i> (11437) | 10 ² -10 ³ | luxuriant | >50% |
| <i>Clostridium tetani</i> (10779) | 10 ² -10 ³ | luxuriant | >50% |
| <i>Escherichia coli</i> (25922) | 10 ² -10 ³ | inhibited | 0% |
| <i>Staphylococcus aureus</i> (25923) | 10 ² -10 ³ | inhibited | 0% |

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.



VM1497 Clostridial MiVeg Agar
(Image taken against dark background)

1. Control
2. *Clostridium perfringens*

Further Reading

1. Vera J., 1962, Presented Pa. Soc. Med. Tech., York, Pa.

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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