

## Technical Information

### Dextrose MiVeg Peptone Agar

**Product Code : VM1649**

**Application:-** Dextrose MiVeg Peptone Agar is used for the general cultivation of organisms.

### Composition

Ingredients	Gms / Litre
MiVeg peptone	20.0
Dextrose	10.0
Sodium chloride	5.0
Agar	15.0
Final pH ( at 25°C)	7.2±0.2

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

### Principle & Interpretation

Dextrose MiVeg Peptone Agar is prepared by using Miveg peptone in place of animal based peptones thereby making the medium free from BSE/TSE risks. This medium is the modification of Dextrose Peptone Media formulated as per suggestion by Williams (1) for the cultivation of microorganisms, which are fastidious, or present in small numbers, and also for the enumeration of the thermophilic bacteria responsible for flat sour spoilage of canned food. The conventional medium is also recommended by AOAC for the routine cultivation purpose (2). MiVeg peptone present in the medium provides nitrogenous compounds like amino acids, peptides etc. for the growth of the organisms. Dextrose is the energy source. The agar medium is also serve an excellent base for the Blood Agar preparation. In the special petri plates it can support good growth of the anaerobic microorganisms.

### Methodology

Suspend 50 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

Light 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

Light yellow coloured clear to slightly opalescent gel forms in petri plates.

#### Reaction

Reaction of 5.0 % w/v aqueous solution pH: 7.2 ±0.2 at 25°C

#### pH range

7.0-7.4

#### Cultural Response/Characteristics

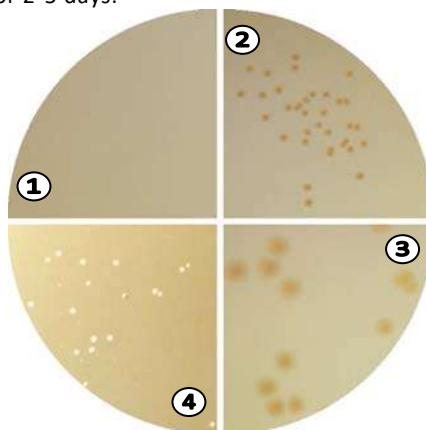
Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
<i>Escherichia coli</i> (25922)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
<i>Pseudomonas aeruginosa</i> (27853)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
<i>Staphylococcus aureus</i> (25923)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
<i>Streptococcus pyogenes</i> (19615)	10 <sup>2</sup> -10 <sup>3</sup>	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.



**VM1649 Dextrose MiVeg Peptone Agar**

1. Control
2. *Escherichia coli*
3. *Pseudomonas aeruginosa*
4. *Staphylococcus aureus*

## Further Reading

1. Williams O.B., 1936, Food Res., 1(3):217
2. Association of Official Analytical Chemists, 1978, Bacteriological Analytical Manual, 5<sup>th</sup> ed. AOAC, Washington, D.C.

## 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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