

## Technical Information

### Rose Bengal Chloramphenicol MiVeg Agar

#### Product Code : VM1640

**Application:-** Rose Bengal Chloramphenicol MiVeg Agar is recommended for the selective isolation and enumeration of yeasts & moulds from foods and environmental materials.

#### Composition

Ingredients	Gms / Litre
MiVeg peptone No. 4	5.0
Dextrose	10.0
Monopotassium phosphate	1.0
Magnesium sulphate	0.5
Rose Bengal	0.05
Chloramphenicol	0.1
Agar	15.5
Final pH (at 25°C)	7.2 ± 0.2

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

#### Principle & Interpretation

Rose Bengal Chloramphenicol MiVeg Agar is prepared by adding MiVeg peptone No. 4 instead of mycological peptone thus making the medium free from BSE/TSE risks. Rose Bengal Chloramphenicol MiVeg Agar is the modification of Rose Bengal Chloramphenicol Agar which was formulated originally by Jarvis (1) and further modified by Overcast and Weakley (2). The use of rose bengal in the media having neutral pH was reported by Smith and Dawson (3).

MiVeg peptone No.4 supplies necessary nutrients needed for microbial growth. Dextrose act as an energy source of the medium. Chloramphenicol inhibits gram-negative bacteria. Rose bengal dye suppresses bacterial development and reduces the spreading of moulds, controlling size and height of mould colonies such as *Rhizopus* species (4).

Monopotassium phosphate buffers the medium. Magnesium sulphate supply necessary trace elements. The medium has neutral pH, which with antibiotics have noted to be advantageous (5, 6). Rose bengal is taken up by mould and yeast colonies thereby assisting in enumeration (1). The number of yeasts or moulds is calculated per gm/ml of sample to be tested, by multiplying the number of colonies with dilution factor.

#### Methodology

Suspend 32.15 grams of powder media in 1000 ml distilled water. Mix thoroughly and heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well before pouring.

#### Quality Control

##### Physical Appearance

Pink coloured, homogeneous, free flowing powder.

##### Gelling

Firm, comparable with 1.55% Agar gel.

##### Colour and Clarity of prepared medium

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

##### Reaction

Reaction of 3.22% w/v aqueous solution is pH 7.2 ± 0.2 at 25°C.

##### pH Range

7.0 - 7.4

##### Cultural Response/Characteristics

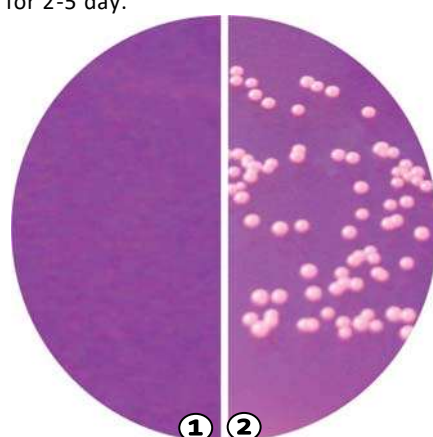
Cultural characteristics observed after an incubation at 25-30°C for 5 days.

Organisms (ATCC)	Growth
<i>Aspergillus niger</i> (16404)	luxuriant
<i>Bacillus subtilis</i> (6633)	inhibited
<i>Cladosporium cladosporoides</i> (45534)	luxuriant
<i>Enterococcus faecalis</i> (29212)	inhibited
<i>Escherichia coli</i> (25922)	inhibited
<i>Mucor racemosus</i> (42647)	luxuriant
<i>Penicillium notatum</i> (10108)	luxuriant
<i>Saccharomyces cerevisiae</i> (9763)	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.



VM1640 Rose Bengal Chloramphenicol

MiVeg Agar

1. Control

2. *Saccharomyces cerevisiae*

## Further Reading

1. Jarvis B., 1973, J. Appl. Bacteriol., 36:723.
2. Overcast W.W. and Weakley D.J., 1969, J. Milk Food Technol., 32:442.
3. Smith and Dawson V.T., 1944, Soil Sci., 58:467.
4. Ottow J.C.G. and Glathe H., 1968, Appl. Microbiol., 16(1):170.
5. Koburger J.A., 1968, Bact. Proc; 13:A73.
6. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification- Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.

## 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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