

Technical Information

Alternative Thioglycollate MiVeg Medium

Product Code : VM1010

Application:- Alternative Thioglycollate MiVeg Medium is recommended for sterility testing of certain biological products which are turbid or viscous.

Composition

Ingredients	Gms / Litre
MiVeg hydrolysate	15.0
Yeast extract	5.0
Dextrose	5.5
Sodium chloride	2.5
L-Cystine	0.5
Sodium thioglycollate	0.5
Final pH (at 25°C)	7.1±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Alternative Thioglycollate MiVeg Medium is prepared by replacing animal based peptones with vegetable based peptones to make media free from BSE/TSE risk. This medium is the modification of Alternative Thioglycollate Medium formulated as described in N.I.H memorandum (1) and is generally used for cultivation of anaerobes and sterility testing of certain biological products used in industries.

This medium contains sodium thioglycollate that can neutralize the bacteriostatic effect of mercurial preservatives. Absence of agar makes it suitable for testing viscous materials and devices having tubes with small lumina. MiVeg hydrolysate, yeast extract, dextrose, L-Cystine provides nitrogenous and carbonaceous compounds, vitamin B complex, trace elements and other essential growth nutrients. Sodium thioglycollate and L-Cystine lower the oxidation-reduction potential of the medium by removing oxygen to maintain a low Eh.

Methodology

Suspend 29 grams of dehydrated media in 1000 ml distilled water. Mix thoroughly. Heat if necessary to dissolve the medium completely. Distribute into tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Note: It is preferable to use freshly prepared medium, alternatively it should be boiled and cooled just once prior to use since due to reheating toxic oxygen radicals are formed.

Quality Control

Physical Appearance

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

Colour and Clarity of prepared medium

Yellow coloured clear solution without any precipitate

Reaction

Reaction of 2.9% w/v aqueous solution is pH 7.1 ± 0.2 at 25°C.

pH range

6.9-7.3

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 30-35°C for 24-72 hours

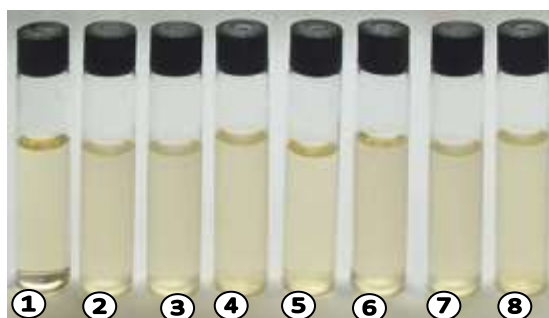
Organisms (ATCC)	Inoculum (CFU)	Growth
# <i>Candida albicans</i> (10231)	10^2 - 10^3	luxuriant
* <i>Bacteroides vulgatus</i> (8482)	10^2 - 10^3	luxuriant
* <i>Clostridium sporogenes</i> (11437)	10^2 - 10^3	luxuriant
<i>Bacillus subtilis</i> (6633)	10^2 - 10^3	luxuriant
* <i>Bacteroides fragilis</i> (25285)	10^2 - 10^3	luxuriant
<i>Micrococcus luteus</i> (9341)	10^2 - 10^3	luxuriant
<i>Neisseria meningitidis</i> (13090) (25923)	10^2 - 10^3	luxuriant
<i>Streptococcus pyogenes</i> (19615)	10^2 - 10^3	luxuriant

Key : * = Incubated anaerobically
= incubated at 25-30°C for 2-7 days.

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.



VM 1010 Alternative Thioglycollate M i Veg Medium

- | | |
|----------------------------------|----------------------------------|
| 1. Control | 5. <i>Bacteroides vulgatus</i> |
| 2. <i>Streptococcus pyogenes</i> | 6. <i>Candida albicans</i> |
| 3. <i>Staphylococcus aureus</i> | 7. <i>Bacteroides fragilis</i> |
| 4. <i>Bacillus subtilis</i> | 8. <i>Clostridium sporogenes</i> |

Further Reading

1.N.I.H. Memorandum, 1955 : Culture Media for Sterility Tests, 4th Revision.

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
- Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for in fingement of any patents. ssDo not use the products if it fails to meet specifcatons for identity and performens parameters.