Dehydrated Culture Media
Bases / Media Supplements

Technical Information

HS MiVeg Medium

Product Code : VM1245

Application:- HS MiVeg Medium is recommended for cultivation of aerobic as well as anaerobic bacteria and also for sterility testing.

Composition

Ingredients	Gms / Litre
MiVeg hydrolysate	15.00
Yeast extract	5.00
Sodium hydrosulphite	0.50
Sodium chloride	2.50
Dextrose	5.50
Resazurin	0.001
Agar	1.00
Final pH (at 25°C)	7.1 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

HS MiVeg medium is prepared by using vegetables peptones in place of animal based peptones thus making it free from BSE/TSE risks. HS MiVeg medium is the modification of the medium described by Bonnel and Raby for use in sterility testing (1). It is similar to Fluid Thioglycollate MiVeg Medium (VM1009) where sodium hydrosulphite is substituted for sodium thioglycollate to obtain oxidized and reduced conditions which are appropriate for the growth of aerobes as well as anaerobes (1, 2). Like the conventional medium this medium (HS medium) can be used for the sterility testing of biological and pharmaceutical products. Bonnel and Raby used HS Medium for control tests on blood products and isolation of *Corynebacteria, Streptococci, Staphylococci,* enteric bacilli*, Neisseriae, Clostridia* etc.

MiVeg hydrolysate and yeast extract in the medium provides necessary nutrients such as amino acids, carbon, sulphur and minerals for the growth of microorganisms. Sodium hydrosulphite helps to create anaerobic atmosphere as it is an oxygen scavenger. Dextrose is the fermentable carbohydrate and resazurin is the redox indicator.

Methodology

Suspend 29.5 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.

Note: If more than the upper one-third of the medium has acquired a pink colour, the medium may be restored once by heating in a water bath or in free flowing steam until the pink colour disappears

Quality Control

Physical Appearance

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

Colour and Clarity of prepared medium

Light straw coloured solution with upper 10% of less medium having pinkish tinge on standing, with slight opalescence.

Reaction

Reaction of 2.95% w/v aqueous solution is pH 7.1 ± 0.2 at 25°C.

pH Range

6.9-7.3

Cultural Response/Characteristics

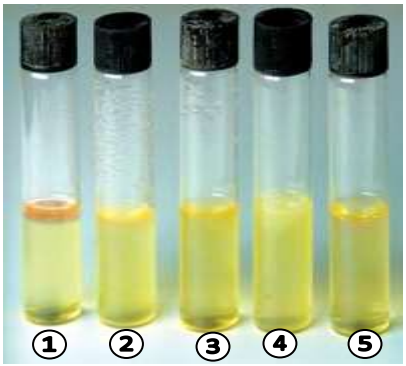
Cultural characteristics observed after an incubation at 35-37°C for 18 –48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth
**Clostridium perfringens* (12924)	10^2-10^3	good-luxuriant
Corynebacterium diphtheria (11913)	10^2-10^3	good-luxuriant
Enterobacter aerogenes (13048)	10^2-10^3	good-luxuriant
Staphylococcus aureus (25923)	10^2-10^3	good-luxuriant
Streptococcus pyogenes (19615	10^2-10^3	good-luxuriant

Key : * = incubated anaerobically

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: 2-8^0 in sealable plastic bags for 2-5 day.



VM1245 HS MiVeg Medium

1. Control
2. *Clostridium perfringens*
3. *Corynebacterium diphtheria*
4. *Enterobacter aerogenes*
5. *Staphylococcus aureus*

Further Reading

1. Bonnel and Raby, 1958, Proc. 7th Cong. Int. Soc. Blood Transfusion, 317, Rome.
2. WHO, 1960, Technical Report Series No. 200, WHO, Geneva

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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