Technical Information

Azide Blood Agar Base, MiVeg

Product Code : VM1158

Application:- Azide Blood Agar Base, MiVeg is used for the isolation and differentiation of *Streptococci* and *Staphylococci.*

Composition

Ingredients	Gms / Litre
MiVeg special peptone	10.0
MiVeg extract	3.0
Sodium chloride	5.0
Sodium azide	0.2
Agar	15.0
Final pH (at 25°C)	7.2±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Azide Blood Agar Base, MiVeg contains MiVeg special peptone and MiVeg extract of vegetable source instead of Peptone special and Beef extract respectively and so the medium becomes free from BSE/TSE risk. This medium is a modification of Azide Blood Agar Base recommended for enumeration of *Streptococci* from cheese (1). MiVeg special peptone used in this medium is highly nutritious and helps in the luxuriant growth of fastidious microorganisms. Azide inhibits growth of many gram-negative bacteria. *Proteus* species may grow on this medium, but its swarming is inhibited. The pH of medium enhances the inhibitory action of sodium azide. At pH 7.2 sodium azide does not interfere with haemolytic reactions of *Streptococci*, however, haemolytic pattern of *Streptococci* is different on Azide Blood Agar Base, MiVeg as compared with nonselective blood agar. Azide promotes haemolytic reactions (2). Use light inoculum for best results and incubate anaerobically for enhancement in haemolytic reaction.

Methodology

Suspend 33.2 grams of powder media in 1000 ml of distilled water. Mix throughly. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. To prepare Azide Blood Agar MiVeg plates, add 5% w/v sterile defibrinated blood aseptically.

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 greeenish tinge, homogeneous, free flowing powder.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity of prepared medium

Basal medium yields yellow coloured, slightly opalescent gel. Addition of 5% v/v sterile defibrinated blood yields cherry red opaque gel which darkens on standing.

Reaction

Reaction of 3.32% w/v aqueous solution is pH 7.2 ± 0.2 at 25°C.

pH range

7.0-7.4

Cultural Response/Characteristics

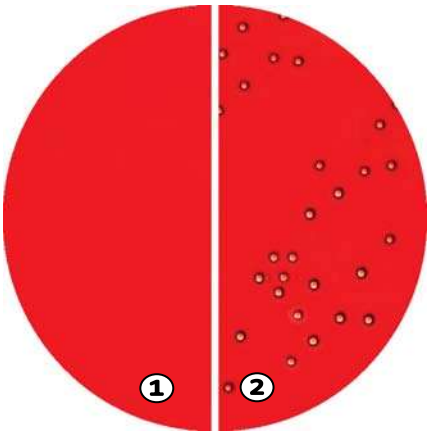
Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Haemolysis
Enterococcus faecalis (29212)	10^2 - 10^3	luxuriant	>50%	alpha/gamma
Escherichia coli (25922)	10^2 - 10^3	none - poor	<10%	-
Staphylococcus epidermidis (12228)	10^2 - 10^3	luxuriant	>50%	-
Streptococcus pyogenes (19616)	10^2 - 10^3	luxuriant	>50%	Beta
Streptococcus pneumoniae(6305)	10^2 - 10^3	luxuriant	>50%	alpha

Key: Incubate in anaerobic condition for heamolytic reaction.

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 days.



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1. Control
2. *Streptococcus pyogenes*

Further Reading

1. Marshall R.(Ed.), 1982, Standard methods for the examination of Dairy Products,16th ed., APHA, Inc., New York.
2. Lichstein H.C. and Snyder M.L., 1941, J.Bact., 42:653.

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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