

Technical Information

CAE (Citrate Azide Enterococcus) MiVeg Agar Base

Product Code : VM2310

Application:- CAE MiVeg Agar Base is a selective media, used for the identification of *Enterococci* in meat, meat products, dairy products and other food stuffs.

Composition

Ingredients	Gms / Litre
MiVeg hydrolysate	15.00
Yeast extract	5.00
Potassium dihydrogen phosphate	5.00
Sodium citrate	15.00
Polysorbate 80	1.00
Sodium carbonate	2.00
Sodium azide	0.40
Agar	15.00
Final pH (at 25°C)	7.0±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

CAE (Citrate Azide Enterococcus) MiVeg Agar Base is prepared by MiVeg hydrolysate (vegetables origin) in place of casein enzymic hydrolysate (animal origin) which makes the medium free from BSE/ TSE risks. This medium is the modification of the medium originally described by Burkwall and Hartmann (1) and modified by Reuter (2) for identification of *Enterococci* in meat, meat products, dairy products and other food stuff. Ingredients like MiVeg hydrolysate and yeast extract provides nitrogenous compounds. Sodium citrate and azide inhibits the accompanying microbial flora. Polysorbate 80 supplies fatty acid. *Enterococci* reduce the colourless 2, 3, 5- triphenyl tetrazolium chloride to form a red coloured complex, formazon thereby imparting red colour to the colonies, (3).

Methodology

Suspend 58.40 grams of powder media in 990 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. Cool to 50°C and aseptically add contents of 1 vial of TTC Solution, 1% (MS2057). Mix well and pour into sterile petri plates.

Warning : Sodiumazide 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 greenish tinge, homogeneous, free flowing powder.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity of prepared medium

Yellow coloured clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 5.84 % w/v aqueous solution pH: 7.0±0.2 at 25°C

pH range

6.8-7.2

Cultural Response/Characteristics

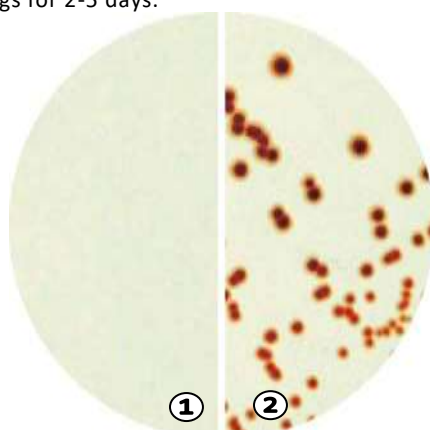
Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Enterococcus faecalis</i> (29212)	10 ² -10 ³	luxuriant	>50%	red
<i>Escherichia coli</i> (25922)	10 ² -10 ³	luxuriant	-	-
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	luxuriant	-	-
<i>Streptococcus pyogenes</i> (12344)	10 ² -10 ³	luxuriant	>10%	-

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.



VM2310 CAE (Citrate Azide Enterococcus)

1. control

2. *Enterococcus faecalis*

Further Reading

1. Burkwall, M.K and Hartman, P.A., 1964. Appl. Microbiol., 12:18.
2. Reuter, G. 1968. Arch. f. Lebensmittethy., 19:53.
3. Saraswat, D.S. et.al. J. Milk Food Techn., 26:114.

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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