

**CAE (Citrate Azide Enterococcus) HiVeg™ Agar Base**

**MV1310**

CAE HiVeg Agar Base is recommended for the identification of *Enterococci* in meat, meat products, dairy products and other food stuffs.

**Composition \*\* :**

Ingredients	Grams/Litre
HiVeg 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.

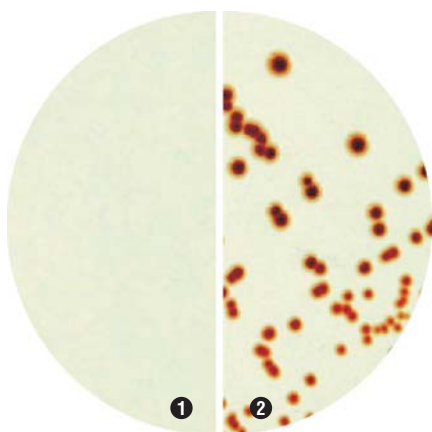
**Directions :**

Suspend 58.40 grams in 990 ml distilled water. 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% (FD057). Mix well and pour into sterile petri plates.

**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.

**Principle and Interpretation :**

This medium is prepared by replacing Casein enzymic hydrolysate (animal based peptone) by HiVeg hydrolysate (vegetables peptone) that makes the medium free of BSE/TSE risks. CAE (Citrate Azide Enterococcus) HiVeg Agar Base 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.



**MV1310 CAE (Citrate Azide Enterococcus) HiVeg Base**

- 1. Control
- 2. *Enterococcus faecalis*

**Product Profile :**

Vegetable based (Code MV) ©	Animal based (Code M)
<b>MV1310</b> HiVeg hydrolysate	<b>M1310</b> Casein enzymic hydrolysate

**Recommended for :** Identification of *Enterococci* from food and dairy products.

**Reconstitution :** 58.40 g/l

**Quantity on preparation (500g):** 8.56 L

**pH (25°C)** : 7.0 ± 0.2

**Supplement :** TTC Solution (FD057)

**Sterilization :** 121°C / 15 minutes.

**Storage :** Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

HiVeg hydrolysate and yeast extract provides nitrogenous compounds. Sodium citrate and azide inhibits the accompanying microbial flora. Polysorbate 80 serves as the fatty acid source. *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).

**Quality Control :**

**Appearance of powder**

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

**Gelling**

Firm, comparable with 1.5% Agar gel.

**Colour and Clarity**

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

**Reaction**

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

**Cultural Response**

Cultural characteristics observed after an incubation at 35 - 37°C for 18-24 hours, with added TTC solution (FD057).

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of Colony
<i>Enterococcus faecalis</i> (29212)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>50%	red
<i>Escherichia coli</i> (25922)	10 <sup>2</sup> -10 <sup>3</sup>	inhibited	-	-
<i>Staphylococcus aureus</i> (25923)	10 <sup>2</sup> -10 <sup>3</sup>	inhibited	-	-
<i>Streptococcus pyogenes</i> (12344)	10 <sup>2</sup> -10 <sup>3</sup>	none-poor	<10%	-

**References :**

- 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.