

VIOLET RED BILE GLUCOSE AGAR W/O LACTOSE
TM 483

For detection and enumeration of Enterobacteriaceae in raw foods

Composition

Ingredients	Gms/Ltr.
Agar	12.00
Glucose	10.00
Peptic digest of animal tissue	7.00
Sodium chloride	5.00
Yeast extract	3.00
Bile salt mixture	1.50
Neutral red	0.03
Crystal violet	0.002

- * Dehydrated powder, hygroscopic in nature, store in a dry place in tightly- sealed containers below 25°C and protect from direct Sunlight.

Instructions for use

Dissolve 38.53gms in 1000ml distilled water. Gently heat to boiling for 2 minutes with gentle swirling and dissolve the medium completely. **DO NOT AUTOCLAVE**. Cool to 45°C and pour into sterile Petri plates.

Appearance: Reddish-purple, slightly opalescent

pH (at 25°C): 7.4 ± 0.2

Principle

VIOLET RED BILE GLUCOSE AGAR W/O LACTOSE is used for the detection and enumeration of Enterobacteriaceae in raw foods. Peptic digest of animal tissue and Yeast extract are the source of nitrogen, sulphur, carbon, vitamins and minerals. Bile salt mixture and Crystal violet are the inhibitors of gram-positive microorganisms. Glucose is the fermentable carbohydrate. Neutral red indicator, changes to red-purple due to the formation of acid during fermentation which change the pH. Sodium chloride is for the osmotic balance. Agar is a solidifying agent. Other gram-negative bacteria can be suppressed by incubation at temperature over 42°C for 18 hours or anaerobic incubation. It can be utilized for the presumptive identification of coliforms in milk and other food materials according to the APHA (Standard Methods for the Examination of Milk Products).

Interpretation

Cultural characteristics observed after inoculating (10^3 - 10^5 CFU / ml), on incubation at 35°C for 18 – 24 hours.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth	Recovery rate	Appearance of colony
<i>Escherichia coli</i>	25922	10^3 - 10^5	Luxuriant	≥50%	pinkish red with bile ppt.
<i>Enterobacter aerogenes</i>	13048	10^3 - 10^5	Luxuriant	≥50%	pink to pinkish red
<i>Salmonella typhimurium</i>	14028	10^3 - 10^5	Good	≥50%	Colourless colonies
<i>Salmonella Enteritidis</i>	13076	10^3 - 10^5	Good	≥50%	Light pink

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<i>Staphylococcus aureus</i>	25923	10 ⁵	Inhibited	0%	-
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References

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