

ClearLine[®]

VIOLET RED BILE GLUCOSE AGAR (VRBGA)

INTENDED USE

Violet Red Bile Glucose Agar is recommended for the enumeration of coliforms in food or dairy products.

FORMULA

Ingredients in grams per liter of purified water

Peptone of gelatin	7.00	Sodium chloride	5.00
Yeast extract	3.00	Neutral red	0.03
Bile salt mixture	1.50	Crystal violet	0.002
Dextrose	10.00	Agar	13.50*

*10 -15 g according to gel strength

Adjusted and/or supplemented as required to meet performance criteria.

STORAGE

Bottles: 2 - 25°C

Dehydrated media: 2 - 30°C

The expiration date on the product label applies to the product in its intact packaging when stored as directed.

DIRECTIONS FOR PREPARATION

For dehydrated media

1. Dissolve 40 g in 1 L of purified water. Mix thoroughly.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium. **DO NOT OVERHEAT. DO NOT AUTOCLAVE.**
3. Mix well and cool to 45-50°C until ready to pour.
4. Pour in Petri plate and let solidified on a cool horizontal surface.

For bottle media

1. Heat the bottle at 95°C in water bath until melted.
2. Mix well and cool to 45-50°C until ready to pour.
3. Pour in Petri plate and let solidified on a cool horizontal surface.

PROCEDURE

Pour Plate Method

1. Pipette 1 mL of a homogenate suspension or its 10 fold dilution into a sterile Petri dish.
2. Add 15 mL of the cooled medium, mix gently. Allow medium to solidify before incubating.
3. Incubate 24 hours at 30, 35 or 37°C according to protocol.

Surface Plating Technique

1. Pipette 0.1 mL of a homogenate suspension or its 10 fold dilution onto a prepared plate of VRBA medium and streak the sample evenly across the plate surface.
2. Incubate 24 hours at 30, 35 or 37°C according to protocol.

RESULTS

Enterobacteriaceae ferment dextrose, produce acid products, and form pink to reddish colonies with reddish precipitate.

LIMITATION OF THE PROCEDURE

This product is for laboratory use only.

VRBGA may not be completely inhibitory to Gram-positive organisms, and will grow Gram-negative bacilli other than members of *Enterobacteriaceae*. Perform a Gram stain and biochemical tests to identify isolates.

QUALITY CONTROL

Physical appearance: Prepared medium is solid, slightly opalescent and reddish-purple.

Final pH: 7.4 ± 0.2 at 25°C

Expected Cultural Response

Organism	Inoculum CFU	Growth for 24 hours at 30°C	Colonies color	Precipitate zone
<i>Enterococcus faecalis</i> ATCC 29212 • WDCM 00087	10 ³ -10 ⁴	Inhibited	-	-
<i>Escherichia coli</i> ATCC 25922 • WDCM 00013	10-10 ²	Growth	Pink to red	+
<i>Salmonella typhimurium</i> ATCC 14028 • WDCM 00012	10-10 ²	Growth	Pink to red	+

This is an example of organisms routinely used for testing

REFERENCE

1. ISO 21528-1:2017. Microbiology of the food chain - Horizontal method for the detection and enumeration of *Enterobacteriaceae* - Part 1: Detection of *Enterobacteriaceae*
2. ISO 21528-2:2017. Microbiology of the food chain - Horizontal method for the detection and enumeration of *Enterobacteriaceae* - Part 2: Colony-count technique