

MM0115

Violet Red Bile Glucose Agar (V.R.B.G.A.)

Use and description:

This is a modification of Violet Red Bile Agar by Mossel. It contains glucose instead of lactose and it allows the detection and enumeration of all *Enterobacteriaceae* in food samples. This medium complies with recommendations of the International Organization for Standardization (ISO) and the European Pharmacopeia II for food examination. Crystal violet and bile salts inhibit accompanying bacterial flora. Neutral red detects acid production of *Enterobacteriaceae* from glucose.

Composition per liter:

Gelatine peptone.....	7.0 g
Yeast extract.....	3.0 g
Bile salts.....	1.5 g
Glucose.....	10.0 g
Sodium chloride.....	5.0 g
Neutral red.....	30.0 mg
Crystal violet.....	2.0 mg
Agar.....	12.0 g

Final pH of the ready to use medium: 7.4 ± 0.2

Medium preparation:

Add 38.5 grams of dehydrated culture medium to 1 liter distilled water until evenly dispersed. Heat with repeated stirring and boil for two minutes to prevent overheating. FURTHER STERILISATION IS NOT REQUIRED. Cool to 45°C, mix well and dispense into tubes or bottles.

Quality specification:

Dehydrated medium: homogeneous, light reddish-beige fine powder.
Ready to use medium: clear to slightly hazy and reddish purple.

Microbiological response:

Organism	Result
<i>Escherichia coli</i> ATCC 25922	Growth, red colonies
<i>Salmonella typhimurium</i> ATCC 14028	Growth, red colonies
<i>Enterobacter aerogenes</i> ATCC 13048	Growth, red colonies
<i>Staphylococcus aureus</i> ATCC 25923	Growth, inhibited

Storage:

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or if the color has changed from the original.