

VIOLET RED BILE AGAR

INTENDED USE:

A selective medium for the detection and enumeration of coliform bacteria, especially the coli-aerogenes-group in water, milk and other dairy products.

PRINCIPLE AND INTERPRETATION:

Peptone and Yeast extract are a source of nitrogen, sulfur, carbon, vitamins and minerals. Bile salts and crystal violet are the inhibitors of gram-positive microorganisms. Lactose is the fermentable carbohydrate. Neutral red change to red-purple due to the building of acid during fermentation which change the pH. Sodium chloride is for the osmotic balance. Other gram-negative bacteria can be suppressed by incubation at temperature over 42°C for 18 hours or anaerobic incubation. Lactose fermenting coliforms give red colonies with precipitation of bile salts. Lactose non-fermenters and late lactose fermenters produce pale colonies.

COMPOSITION:

Ingredients	Gr/Liter
Peptone (from gelatin)	7 gr
Yeast extract	3 gr
Bile salts	1,5 gr
Lactose	10 gr
Sodium chloride	5 gr
Neutral red	0,03 gr
Crystal violet	0,002 gr
Agar	12 gr

***Formula adjusted, standardized to suit performance parameters

pH: 7,4 ± 0,2

PRECAUTIONS:

For professional use only. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

TEST PROCEDURE:

Spread Plate Method:

1. Prepare decimal dilutions in sterile diluent to obtain 10-100 CFU per plate.
2. Aseptically inoculate agar surface with 0,1ml of well mixed diluted sample.
3. Spread the dilution evenly over the surface of the medium.
4. Using a sterile spreader device, distribute the inoculum evenly over the agar surface.
5. Incubate plates aerobically for 24 hours at 35°C ± 2.

QUALITY CONTROL:**1.Sterility Control:**

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

2.Physical/Chemical Control

pH: 7,4 ± 0,2

Appearance: Reddish purple

3.Microbiological Control: Cultural response on VRB Agar at 35°C ± 2 after 18-24 hours incubation.

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Pseudomonas aeruginosa ATCC 27853	10-100	Good	Colourless colonies without precipitate
Escherichia coli ATCC 8739	10-100	Good	Dark red colonies with precipitate
Salmonella typhimurium ATCC 14028	10-100	Good	Colourless colonies without precipitate
Enterococcus faecalis ATCC 29212	100-1000	Inhibited	-

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STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C. Use before expiry date on the label. Do not use beyond stated expiry date.

DISPOSAL:

Incubated prepared medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected plate should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

PACKAGING:

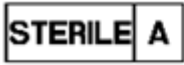
Katalog Number: 02051

Packaging: Single wrap

Content: 10 plates/each package

REFERENCES:

1. Marshall, R. T. (ed.). 1993. Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
2. Vanderzant, C., and D. F. Splittstoesser (eds.). 1992. Compendium of methods for the microbiological examination of foods, 3rd ed. American Public Health Association, Washington, D.C.
3. www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalyticalmanualBAM/default.htm.



Aseptic Sterile



Batch Code



Catalogue Number



Negative Controls



Positive Controls



Use by



Temperature
Limitation



Do not reuse



Contains sufficient
for <n> tests



Look at user manual



Manufacturer